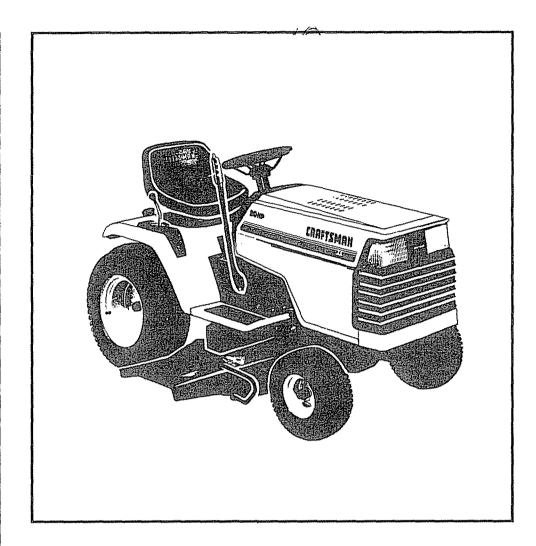
SEARS OWNER'S MANUAL

MODEL NO. 917.254460

MODEL NO. 917.250040 (without Mower Deck)

Caution:
Read and follow
all Safety Rules
and Instructions
Before Operating
This Equipment



CRAFTSMAN® 20.0 HP TWIN ELECTRIC START 44' MOWER DECK 6 SPEED TRANSAXLE GARDEN TRACTOR

- Assembly
- Operation
- Maintenance
- Service and Adjustment
- Repair Parts



LOOK FOR THIS SYMBOL TO POINT OUT IMPORTANT SAFETY PRECAU-TIONS. IT MEANS - ATTENTION! BE-COME ALERT! YOUR SAFETY IS IN-VOLVED. CAUTION: LOOK FOR THIS WORD TO POINT OUT IMPORTANT EQUIPMENT PRECAUTIONS.

NOTE: LOOK FOR THIS WORD TO POINT OUT IM-PORTANT INFORMATION ABOUT THE OPERATION AND PERFORMANCE OF YOUR TRACTOR.



RULES FOR SAFE OPERATION

WARNING: This unit is equipped with an internal combustion engine and should not be used on or near any unimproved forest covered, brush covered or grass covered land unless the engine's exhaust system is equipped with a spark arrester meeting applicable local or area laws (if any). If a spark arrester is used, it should be maintained in effective working order by the operator. (See REPAIR PARTS for part number identification).

In the State of California the above is required by law (Section 4442 of the California Public Resources Code). Other States may have similar laws. Federal laws apply on federal lands.

- Know the controls and how to stop quickly. READ THIS OWNER'S MANUAL and instructions furnished with attachments
- Do not allow children to operate the machine. Do not allow adults to operate it without proper instruction.
- Do not carry passengers. Do not mow when children and others are around.
- Always wear substantial footwear. Do not wear loose fitting clothing that could get caught in moving parts.
- Keep your eyes and mind on your tractor, mower, and the area being cut. Do not let other interests distract you.
- Do not attempt to operate your tractor or mower when not in the driver's seat.
- Always get on or off your tractor from the operator's left hand side.
- Clear the work area of objects (wire, rocks, etc.) which might be picked up and thrown.
- Disengage all attachment clutches before attempting to start the engine.
- Disengage power to attachments and stop the engine before leaving the operator's position.
- 11. Disengage power to mower, stop the engine, and disconnect spark plug wire(s) from spark plug(s) before cleaning, making an adjustment, or repair. Be careful to avoid touching hot muffler or engine components.
- Disengage power to attachments when transporting or not in use.
- 13. Take all possible precautions when leaving the vehicle unattended. Disengage the power take-off, lower the attachments, shift into neutral, set the parking brake, stop the engine, and remove the key.
- 14 Do not stop or start suddenly when going uphill or downhill. Mow up and down the face of slopes (not greater than 15°), never across the face. Refer to page 55.
- Reduce speed on slopes and make turns gradually to prevent tipping or loss of control. Exercise extreme caution when changing direction on slopes.
- 16. While going up or down slopes, place gear shift control lever in 1st gear position to negotiate the slope without stopping.
- 17. Never mow in wet or slippery grass, when traction is unsure, or at a speed which could cause a skid.
- Stay alert for holes in the terrain and other hidden hazards. Keep away from drop-offs.
- Do not drive too close to creeks, ditches, and public highways.
- Exercise special care when mowing around fixed objects in order to prevent the blades from striking them. Never deliberately run tractor or mower into or over any foreign objects.
- 21. Never shift gears until tractor comes to a stop.
- Never place hands or feet under the mower, in discharge chute, or near any moving parts while tractor or mower is running. Always keep clear of discharge chute.
- 23. Use care when pulling loads or using heavy equipment.
 - Use only approved drawbar hitch points.
 - b. Limit loads to those you can safely control.

- c. Do not turn sharply. Use care when backing.
- Use counterweight or wheel weights when suggested in owner's manual.
- 24. Watch out for traffic when crossing or near roadways
- When using any attachments, never direct discharge of material toward bystanders nor allow anyone near the vehicle while in operation.
- 26. Handle gasoline with care it is highly flammable.
 - a. Use approved gasoline containers
 - b. Never remove the fuel cap of the fuel tank or add gasoline to a running or hot engine or an engine that has not been allowed to cool for several minutes after running. Never fill tank indoors. Always clean up spilled gasoline.
 - Open doors if the engine is run in the garage exhaust fumes are dangerous. Do not run the engine indoors.
- Keep the vehicle and attachments in good operating condition, and keep safety devices in place and working.
- 28. Keep all nuts, bolts, and screws tight to be sure the equipment is in safe working condition.
- 29. Never store the equipment with gasoline in the tank inside a building where fumes may reach an open flame or spark. Allow the engine to cool before storing in any enclosure.
- To reduce fire hazard, keep the engine free of grass, leaves, or excessive grease. Do not clean product while engine is running.
- 31. Except for adjustments, DO NOT operate engine if air cleaner or cover directly over carburetor air intake is removed Removal of such part could create a fire hazard.
- 32. Do not operate without a muffler, or tamper with exhaust system. Damaged mufflers or spark arresters could create a fire hazard. Inspect periodically and replace if necessary.
- 33. The vehicle and attachments should be stopped and inspected for damage after striking a foreign object, and the damage should be repaired before restarting and operating the equipment.
- 34. Do not change the engine governor settings or overspeed the engine; severe damage or injury may result.
- 35. When using the vehicle with mower, proceed as follows:
 - a. Mow only in daylight or in good artificial light.
 - b. Shut the engine off when unclogging chute.
 - Check the blade mounting bolts for proper tightness at frequent intervals.
- Do not operate the mower without the entire grass catcher, on mowers so equipped, or the deflector shield in place.
- Disengage power to mower before backing up. Do not mow in reverse unless absolutely necessary and then only after careful observation of the entire area behind the mower.
- 38. Under normal usage the grass catcher bag material is subject to deterioration and wear. It should be checked frequently for bag replacement. Replacement bags should be checked to ensure compliance with the original manufacturer's recommendations or specifications.

CONGRATULATIONS on your purchase of a Sears Garden Tractor. It has been designed, engineered and manufactured to give you the best possible dependability and performance. Should you experience any problem you cannot easily remedy, please contact your nearest Sears Service Department. We have competent, well-trained technicians and the proper tools to service or repair this unit.

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A Sears Maintenance Agreement is available on this product. See the nearest Sears store or service center for details.

SERIAL NUMBER
DATE OF PURCHASE
THE SERIAL NUMBER WILL BE FOUND ON THE MODEL PLATE UNDER THE SEAT.
YOU SHOULD RECORD THESE NUMBERS AND KEEP FOR FUTURE REFERENCE.

CUSTOMER RESPONSIBILITIES

Read and retain this manual. Study and observe the safety rules. Always use care when using your tractor. Always keep your tractor and mower clean. Follow a regular schedule in maintaining, caring for, and using your tractor. A well cared for tractor will run better and last longer.

ATTACHMENTS

This unit can use many attachments now available at your Sears store. See pages 53-54 for a list of available attachments.

LIMITED TWO YEAR WARRANTY ON ELECTRIC START RIDING EQUIPMENT

For two years from date of purchase, when this riding equipment is maintained, lubricated, and tuned up according to the operating and maintenance instruction in the owner's manual, Sears will repair free of charge any defect in material or workmanship in this electric start riding equipment.

This warranty excludes blade(s), blade adapter(s), spark plug(s), air cleaner and belt(s), which are expendable and become worn during normal use.

This warranty does not cover:

- Tire replacement or repair caused by punctures from outside objects (such as nails, thorns, stumps, or glass); and
- repairs necessary because of operator abuse or negligence, including the failure to maintain the equipment according to instructions contained in the owner's manual; and
- riding equipment used for commercial or rental purposes.

FULL 90 DAY WARRANTY ON BATTERY

For 90 days from the date of purchase, if any battery included with this riding equipment proves defective in material or workmanship and our testing determines the battery will not hold a charge. Sears will replace the battery at no charge.

WARRANTY SERVICE IS AVAILABLE BY CONTACTING THE NEAREST SEARS SERVICE CENTER DEPARTMENT IN THE UNITED STATES. This warranty applies only while this product is in use in the United States.

This warranty gives you specific legal rights, and you may also have other rights which may vary from state to state.

SEARS, ROEBUCK and CO., D/731CR-W, Sears Tower, Chicago, IL 60684



DO NOT OVERLOAD TRACTOR BY TOWING WEIGHTS GREATER THAN 150 POUNDS (68 kg).

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To assemble and adjust your tractor you will need:

(2) 7/16" Wrenches Ratchet wrench

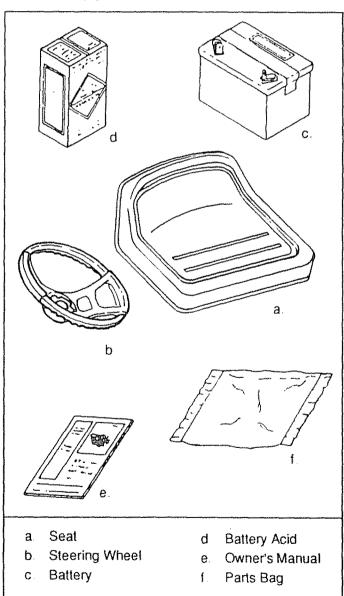
(1) 3/4"" Wrench Tire Pressure Gauge

(1) 9/16" Wrench Screwdriver (1) 1/2" Wrench Utility Knife (1) 3/4" Socket (2) 11/16 wrench

NOTE: RIGHT HAND (R.H.) AND LEFT HAND (L.H.) ARE DETERMINED FROM OPERATOR'S POSITION WHILE SEATED ON THE TRACTOR.

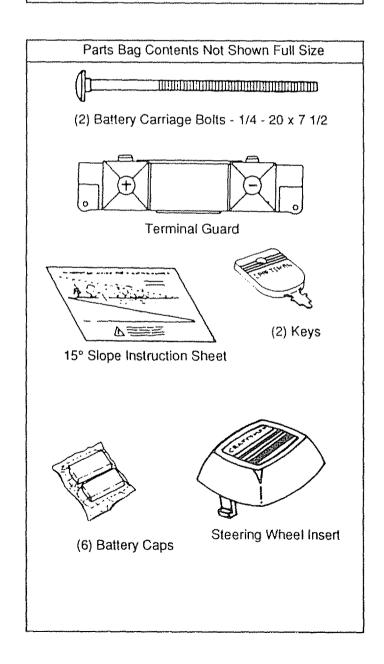
UNPACKING INSTRUCTIONS

- Remove box from carton. The box contains the items shown below.
- Cut down four corners of the carton with a utility knife and fold down sides.
- 3. Remove mower deck from skid.
- 4. Disengage Parking Brake
- 5. Carefully guide the tractor backwards off the skid





The operation of any tractor can result in foreign objects thrown into the eyes, which can result in severe eye damage. Always wear safety glasses or eye shields before starting your tractor and while mowing. We recommend Wide Vision Safety Mask for over the spectacles or standard safety glasses, available at Sears Retail or Catalog Stores.



ASSEMBLY LOCATION	PARTS BAG CONTENTS SHOWN FULL SIZE									
BATTERY	(2) Wing Nut, 1/4 - 20									
BATTERY TERMINALS	(2) Hex Bolt, 1/4 - 20 x 3/4 (2) Lockwasher, 1/4 (2) Washer, 9/32 x 5/8 x 16 Ga (2) Hex Nut, 1/4 - 20									
SEAT	(1) Washer 17/32 x 1 3/16 (1) Shoulder Bolt 5/16 - 18 x 12 Ga									
	(1) Adjustment Knob 1/2									



WEAR EYE AND FACE SHIELD.
WASH HANDS OR CLOTHING IMMEDIATELY IF ACCIDENTALLY IN CONTACT WITH BATTERY ACID.

DO NOT SMOKE, FUMES FROM CHARGED BATTERY ACID ARE EXPLOSIVE.

NOTE: THIS TRACTOR IS EQUIPPED WITH AN OPERATOR PRESENCE SENSING SWITCH. ANY ATTEMPT BY THE OPERATOR TO LEAVE THE SEAT WITH THE ENGINE RUNNING AND ATTACHMENT CLUTCH ENGAGED WILL SHUT OFF THE ENGINE.

1. Prepare Battery

READ INSTRUCTIONS INCLUDED WITH THE BATTERY VENT CAPS FOUND IN BAG OF PARTS. ALWAYS WEAR GLOVES, CLOTHING AND GOGGLES TO PROTECT YOUR HANDS, SKIN AND EYES.

a. Fill and charge battery (before installing). NOTE: SEE DETAILED INSTRUCTIONS PACKAGED WITH BATTERY VENT CAPS IN BAG OF PARTS.

NOTE: OVERCHARGING WILL SHORTEN BATTERY LIFE.

- Fill battery with battery acid to bottoms of tubes in cells (Fig 1). DO NOT OVERFILL. OVERFILLING WILL RESULT IN DAMAGE TO TRACTOR.
- c. Check level of battery acid after 30 minutes. Add additional battery acid if necessary. NOTE: PRESS VENT CAPS INTO BATTERY UNTIL FASTENED SECURELY.

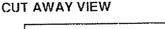
NOTE: OBSERVE SAFETY PRECAUTIONS, LISTED IN BOX ABOVE, REQUIRED FOR BATTERY CHARGING.

- d. Charge battery at a rate of six amperes for one hour.
- e. Neutralize excess battery acid (from filling battery) for disposal by adding it to 7.4 litres (2 gallons) of water in a 19 litres (5 gallon) plastic container. Stir with a wooden or plastic paddle while adding baking soda until the addition of more soda causes no more foaming.

2. Install Seat

Seat position should be adjusted forward or backward so that the operator can comfortably reach Clutch/Brake Pedal and safely operate the tractor (Fig. 14).

- a. Remove cardboard from seat pan.
- b. Place seat on seat pan. Screw adjustment knob and flat washer into seat (Fig. 2) Screw shoulder bolt into seat (Fig. 2). Adjustment knob, shoulder bolt and washer found in bag of parts.



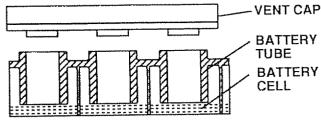


FIGURE 1

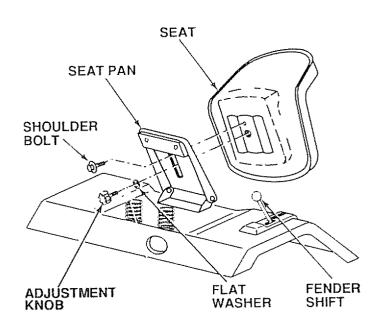


FIGURE 2



THE ADJUSTMENT BOLT AND FLAT WASHER MUST BE TIGHTENED SECURELY TO PREVENT MOVEMENT OF SEAT.

- c. Tighten shoulder bolt using a 1/2" wrench. NOTE: THE SHOULDER BOLT WILL BE LOOSE IN THE SEAT PAN SLOT.
- d. Tighten adjustment knob finger tight.
- e. Place seat in operating position. Sit on the seat and press clutch/brake pedal all the way down. If operating position is not comfortable, adjust seat.
- f. To adjust: raise seat. Loosen adjustment knob. Slide seat to desired position. Tighten adjustment knob securely...

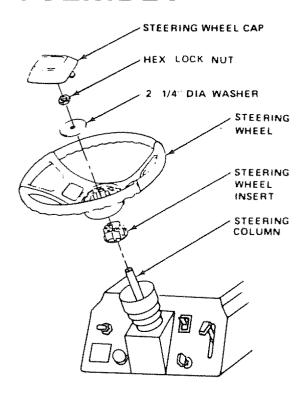
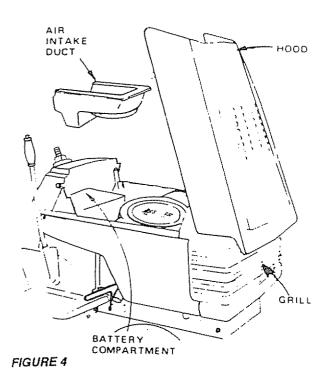


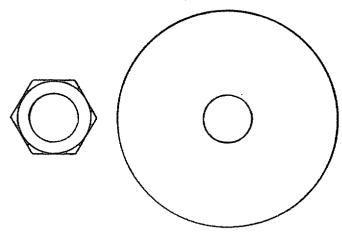
FIGURE 3



3. Install Steering Wheel

NOTE POSITION FRONT WHEEL FORWARD.

a Use a 3/4" wrench to remove lock nut, and 2 - 1/4" diameter washer (shown full size below) from steering column (Fig. 3)



- b. Position steering wheel over steering wheel insert (Fig. 3). BARS OF STEERING WHEEL SHOULD POINT STRAIGHT ACROSS TRACTOR.
- c Secure steering wheel to steering column using 2 1/4 diameter washer and lock nut (Fig. 3). Torque to 68 N-m (50 Ft. Lbs.)
- d Snap steering wheel cap in place on steering wheel Steering wheel cap found in bag of parts

4. Check Tires

Reduce tire pressure to 1 Kg/cm² (14 PSI) in front tires and 0.71 Kg/cm² (10 PSI) in rear tires. (Tires were overinflated for shipping purposes.)

5 Install Battery



DO NOT SHORT BATTERY TERMINALS

BEFORE INSTALLING BATTERY, REMOVE METAL BRACLETS, WRISTWATCH BANDS, RINGS, ETC.



IF BATTERY IS REMOVED, DO NOT OPERATE ENGINE. SPARKING MAY OCCUR.

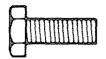
- a Lift hood from rear sides (Fig. 4).
- b Make sure drain tube (Fig. 5) is fastened to drain hole in battery tray and battery tray is positioned in hole of battery support.
- c Place battery in plastic tray (battery terminals to front of tractor) (Fig. 5)



POSITIVE TERMINAL MUST BE CONNECTED FIRST TO PREVENT SPARKS FROM ACCIDENTAL GROUNDING.

e. Connect RED battery cable to positive (+) battery terminal with hex bolt, flat washer, lockwasher and hex nut (shown full size below) found in bag of parts (Fig. 5). Tighten securely.

f. Connect BLACK ground cable to negative (-) battery terminal with remaining hex bolt, flat washer, lockwasher and hex nut (shown full size below) found in bag of parts (Fig. 5). Tighten securely.



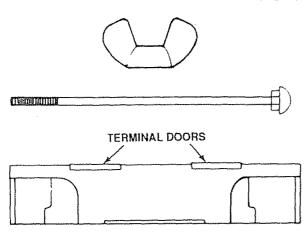






NOTE: IF YOU HAVE A WEAK BATTERY, SEE "START-ING YOUR TRACTOR WITH A WEAK BATTERY" (PAGE 20)

- g. Using the square hole on one side of the battery support (Fig. 6) insert one battery bolt, head of bolt down. Fasten the battery bolt to the terminal guard using wing nut as shown (Fig. 6). Bolts, nuts, and terminal guard, shown below, are found in bag of parts.
- h. Assemble the remaining battery bolt to other side of battery support and fasten terminal guard to it with remaining wing nut. Tighten both wing nuts securely (by hand)) at the same time (Fig. 6).



- Replace air intake duct (Fig. 4). Make sure bottom lip of duct sits between battery and lip of battery tray.
- j. Remove plastic from tractor hood and close

NOTE: USE TERMINAL ACCESS DOORS (FIG. 6) FOR:

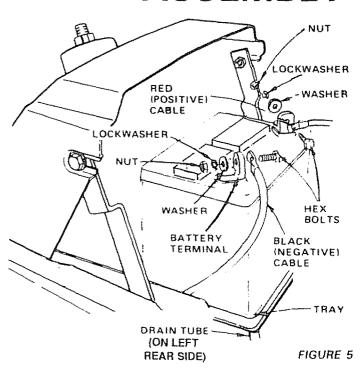
- 1 INSPECTION FOR SECURE CONNECTIONS (TIGHTEN HARDWARE)
- 2 INSPECTION FOR CORROSION
- 3 TESTING BATTERY
- 4 JUMPING (IF REQUIRED)
- 5 CHARGING (IF REQUIRED)

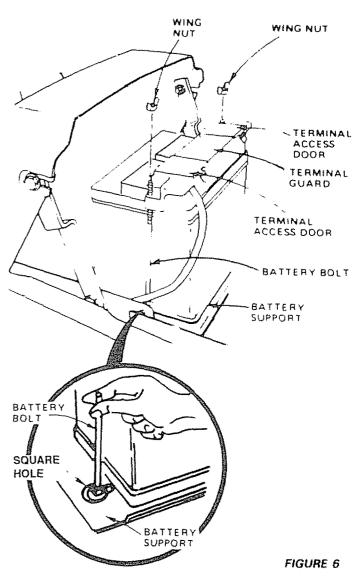
KEEP TERMINAL ACCESS DOORS CLOSED WHEN NOT IN USE.



DO NOT START ENGINE UNTIL MOWER SUSPENSION BRACKET HAS BEEN RE-LEASED. SEE MOWER AND DRIVE BELT INSTALLATION, PAGE 10.

ASSEMBLY





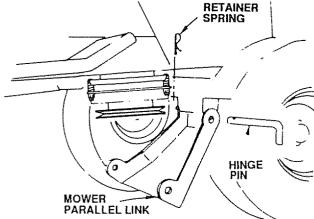
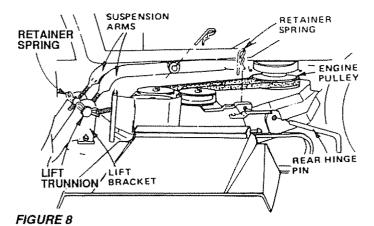


FIGURE 7

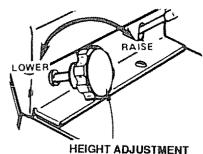


ATTACHMENT CLUTCH
SWITCH (DISENGAGED
POSITION)

HEIGHT ADJUSTMENT
KNOB

ATTACHMENT
LIFT LEVER
PLUNGER

ATTACHMENT
LIFT LEVER



HEIGHT ADJUSTMENT KNOB

6. Mower and Drive Belt Installation INSTALL MOWER PARALLEL LINK

Your tractor has been shipped with the mower parallel link included in the parts carton. Install mower parallel link on tractor (Fig. 7) using hinge pin and retainer spring.

NOTE: SMALLER END OF PARALLEL LINK MOUNTS TO TRACTOR. USE THE SHORTEST HINGE PIN FOR MOUNTING.

INSTALL MOWER

Your mower installs without the use of tools.

- Raise attachement lift lever (Fig. 9) to its highest position.
- Turn height adjustment knob counterclockwise () to lowest position (Fig. 10)
- Slide mower under tractor with discharge guard to R.H. side.
- d. Install rear hinge pin through mower lift brackets and parallel link (Fig. 8). Secure with retainer spring.
- Move attachment lift lever (Fig. 9) forward to lower suspension arms. Remove retainer springs from lift trunnions (Fig. 8).
- Slide trunnions through upper lift bracket holes and secure with retainer springs (Fig. 8).
- g. Pull L.H. idler pulley (Fig. 12) toward the right hand side of the tractor and roll belt over engine pulley (Fig. 8).

NOTE: MOWER DRIVE BELT INSTALLATION DECAL LOCATED ON MOWER HOUSING.

- Use attachment lift lever (Fig 9) to raise mower.
- Turn height adjustment knob clockwise () to the middle of its travel (Fig. 10).

7. Check Cutting Level

The blade housing was set at the factory to cut level. After mowing a short distance, look at the area that was cut. If the blade housing cuts uneven, see "MOWER ADJUSTMENT," page 21

8. Final Assembly

- Make sure all fasteners are tight.
- b. Read and follow the operation instructions (page 11). Know the location and purpose of all controls.
- Check oil and gasoline (page 12) before starting the tractor.

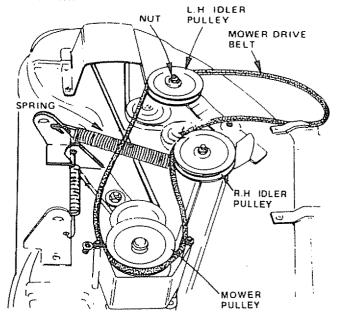
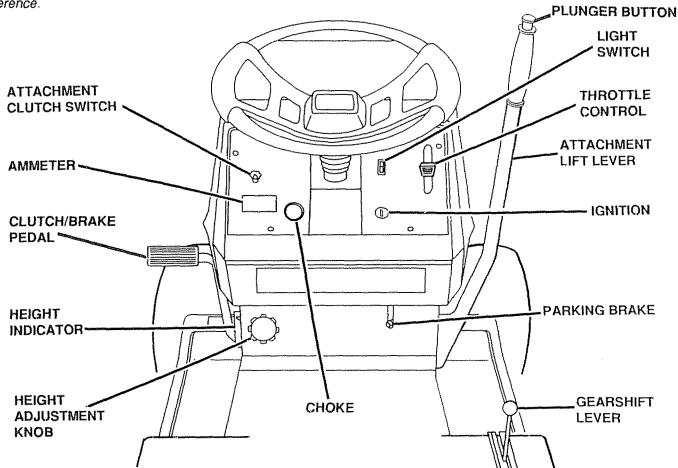


FIGURE 11

READ THIS OWNER'S MANUAL BEFORE OPERATING YOUR GARDEN TRACTOR. If you understand the unit and its operation, you will achieve efficient and peak performance. While reading the manual, compare the illustrations with your Garden Tractor to familiarize yourself with the location of the various controls and adjustments. Study the operating instructions and safety precautions thoroughly to insure proper functioning of your Garden Tractor and to prevent injury to yourself and others. Be sure to pay strict attention to all warnings and cautions; they are included for your safety. Save this manual for future reference.



AMMETER: Each time you start your tractor, check your ammeter. The needle should move toward the (+) charging mark indicating the battery is being charged as you operate your tractor. The headlights will not show a discharge on the ammeter because they are not connected to the battery. (They have their own electrical source.)

ATTACHMENT CLUTCH SWITCH: Pull switch out and up to engage attachment. There will be an engine hesitation as the clutch engages.

ATTACHMENT LIFT LEVER: Use the attachment lift lever to raise and lower the attachment mounted to your tractor. Move the lift lever forward to lower attachment.

CLUTCH/BRAKE PEDAL: The pedal has 2 functions; a clutch and a brake. To engage the brake push the pedal completely down.

HEIGHT ADJUSTMENT KNOB: Use the height adjustment knob to adjust the mower height. With the attachement lift lever in the "up" position, turn knob clockwise () to raise cutting height and counterclockwise () to lower mower cutting height. Lower attachment lift lever.

HEIGHT INDICATOR: Indicates height setting of mower deck. Controlled by height adjustment Knob.

GEARSHIFT: Press the clutch/brake pedal down firmly and move gearshift lever to desired speed.

IGNITION: Place key in ignition and turn to the right to start.

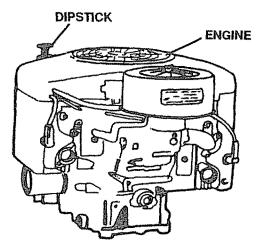
LIGHT SWITCH: Turns the headlights on and off.

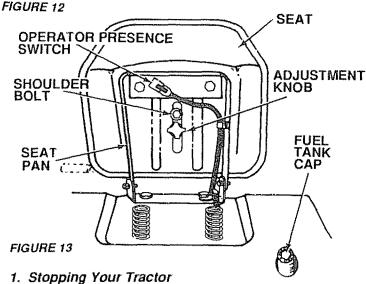
PARKING BRAKE: To set the parking brake, push the clutch/brake pedal completely down. Hold the parking brake lever in "Engaged" position and release pressure from pedal. Clutch/brake pedal will remain in brake position. To release, push pedal in.

THROTTLE CONTROL: Use the throttle control to increase or decrease the speed of the engine.

CHOKE: To start a cold engine, pull choke out to engage.

OPERATION







KNOW HOW TO STOP YOUR TRACTOR BEFORE YOU ATTEMPT TO START THE ENGINE.

NOTE: REMOVE KEY WHEN LEAVING TRACTOR TO PREVENT UNAUTHORIZED USE:

- Push clutch/brake pedal into full "BRAKE" position (Fig. 14).
- b. Move gear shift lever to "NEUTRAL" position (Fig. 15).
- Place parking brake in "ENGAGED" position and release pressure from clutch/brake. Pedal should remain in "BRAKE" position (Fig. 14).

NOTE: MAKE SURE PARKING BRAKE WILL HOLD TRACTOR SECURE.

- d. Place attachment clutch switch in "DISENGAGED" position (Fig. 15).
- Move throttle control to "S" (slow) position (Fig. 15).
- f. Turn ignition key to "OFF" position (Fig. 15).

NOTE: NEVER USE CHOKE TO STOP ENGINE.

2. Starting the Engine



LEARN TO START, STOP AND REVERSE YOUR TACTOR IN A LARGE, OPEN AREA.



THIS TRACTOR IS EQUIPPED WITH INTERLOCK SWITCHES TO PREVENT STARTING OF THE TRACTOR ENGINE WHILE THE ATTACHMENT CLUTCH SWITCH IS IN THE "ENGAGED" POSITION AND/OR THE FOOT PEDAL IS NOT FULLY DEPRESSED. IMMEDIATELY REPLACE SWITCHES THAT ARE NOT IN PROPER WORKING ORDER. DO NOT ATTEMPT TO DEFEAT THE PURPOSE OF THESE SWITCHES.

- a This engine has been shipped filled with summer weight oil (For cold weather operation see chart page 15). Check engine oil level See page 15
- Fillfueltank (Fig. 13) Use fresh, clean, regular unleaded gasoline. (Use of leaded gasoline will increase carbon and lead oxide depsots and reduce valve life.) Capacity is 13 litres (3-1/2 gallons)

NOTE: FRESH, CLEAN WINTER GRADE FUEL MUST BE USED TO INSURE GOOD COLD WEATHER START-ING

CAUTION: EXPERIENCE INDICATES THAT ALCOHOL BLENDED FUELS (CALLED GASOHOL OR USING ETHANOL OR METHANOL) CAN ATTRACT MOISTURE WHICH LEADS TO SEPARATION AND FORMATION OF ACIDS DURING STORAGE. ACIDIC GAS CAN DAMAGE THE FUEL SYSTEM OF ANY ENGINE WHILE IN STORAGE.

TO AVOID ENGINE PROBLEMS, THE FUEL SYSTEM SHOULD BE EMPTIED BEFORE STORAGE FOR 30 DAYS OR LONGER. DRAIN THE GAS TANK, START THE ENGINE AND LET IT RUN UNTIL THE FUEL LINES AND CARBURETOR ARE EMPTY USE FRESH FUEL NEXT SEASON. SEE STORAGE INSTRUCTIONS FOR ADDITIONAL INFORMATION.

NEVER USE ENGINE OR CARBURETOR CLEANER PRODUCTS IN THE FUEL TANK OR PERMANENT DAMAGE MAY OCCUR.



FILL TO BOTTOM OF GAS TANK FILLER NECK DO NOT OVERFILL WIPE OFF ANY SPILLED OIL OR FUEL DO NOT STORE, SPILL OR USE GASOLINE NEAR AN OPEN FLAME

- c Place attachment clutch switchin "disengaged" position (Fig. 15)
- d Push clutch/brake pedal fully into brake position
- e Place gear shift lever in "NEUTRAL" positon (Fig. 15)
- f Pull choke out (Fig. 15)
- g Move throttle control to middle position (Fig. 15)
- h Turn ignition key clockwise () to "START" position and release key as soon as engine starts NOTE: DO NOT RUN STARTER CONTINUOUSLY FOR MORE THAN FIFTEEN SECONDS PER MINUTE If engine does not start after several attempts, move throttle control to "F" (fast) position, wait a few minutes and try again.

NOTE: IF YOU HAVE A WEAK BATTERY, SEE "START-ING YOUR TRACTOR WITH A WEAK BATTERY" (PAGE 20)

i After engine is warm, push choke in. The first time you start the engine, it will take extra cranking time to move fuel from tank to the engine. NOTE: ALLOW ENGINE TO WARM UP FOR A FEW MINUTES BEFORE ENGAGING CLUTCH OF TRACTOR OR ATTACHMENT

) When restarting a warm engine, move throttle control midway between "S" (slow) and "F" (fast) positions Choke may not have to be used.

IMPORTANT: BEFORE DRIVING THE TRACTOR.
INSTALL MOWER OR REMOVE
MOWER PARALLEL LINK

FUNCTION	GEARSHIFT	THROTTLE
Normal Mowing	2 OR 3	
Heavy Mowing	1 OR 2	
Snow Removal	1	FAST
Tilling Plowing	1	MID THROTTLE
Dozing	1	
Grading	2	
Transport	3-6	SLOW-FAST

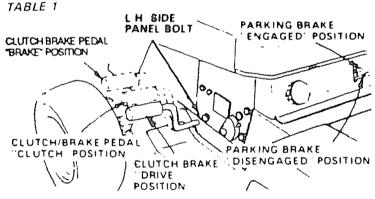


FIGURE 14



READ THE "RULES FOR SAFE OPERATION" CAREFULLY BEFORE OPERATING YOUR MOWER.

THE MOWER MUST BE ADJUSTED PROPERLY FROM FRONT TO REAR AND LEVELED FROM SIDE TO SIDE BEFORE OPERATING THIS IS NECESSARY FOR LEVEL AND EFFICIENT MOWING REFER TO PAGE 21

CAUTION. DO NOT ADD ADDITIONAL WEIGHT TO THE TRACTOR OTHER THAN THE OPTIONAL WHEEL WEIGHTS. EXCESSIVE WEIGHT MAY OVERLOAD AND DAMAGE THE TRANSMISSION



DO NOT OVERLOAD TRACTOR BY TOWING WEIGHTS GREATER THAN 150 POUNDS (68 kg).

OPERATION

3. Operating Your Tractor and Mower

NOTE: THIS TRACTOR IS EQUIPPED WITH AN OPERATOR PRESENCE SENSING SWITCH. ANY ATTEMPT BY THE OPERATOR TO LEAVE THE SEAT WITH THE ENGINE RUNNING AND THE ATTACHMENT CLUTCH SWITCH ENGAGED WILL SHUT OFF THE ENGINE.

CAUTION TO AVOID INJURY

- 1 Read owner's manual
- 2 Know the location and function of all controls
- 3 Keep guards, safety shields and switches in place and working
- 4 Remove objects that can be thrown by blades
- 5 Do not mow when children and others are around
- 6 Never carry children or passengers
- 7 Always look behind machine before backing
- 8. Do not mow where machine can tip or slip
- 9 If machine stops going uphill, stop blade and back slowly down
- 10 Be sure blades and engine have stopped before placing hands or feet near the blades
- 11 Remove key when leaving machine



MAKE SURE PARKING BRAKE WILL HOLD TRACTOR SECURE.

NEVER PLACE YOUR HANDS OR FEET IN OR UNDER ANY POWERED ATTACHMENT OR NEAR ANY MOVING PART WHILE TRACTOR OR ANY POWERED ATTACHMENT IS RUNNING.

NOTE ALWAYS OPERATE ENGINE AT FULL THROTTLE WHEN MOWING TO ASSURE BETTER MOWING PERFORMANCE AND PROPER DISCHARGE OF CUT MATERIAL REGULATE GROUND SPEED BY SELECTING A LOW ENOUGH GEAR (TABLE 1) TO GIVE THE MOWER CUTTING PERFORMANCE PLUS QUALITY OF CUT DESIRED

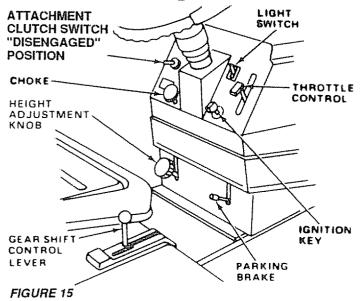


DO NOT OPERATE THE MOWER WITH-OUT EITHER THE ENTIRE GRASS CATCHER, ON MOWERS SO EQUIPPED, OR THE DEFLECTOR SHIELD IN PLACE.

- Select desired height of cut position using height adjustment knob (Fig. 15)
- b Raise lift lever and place attachment clutch switch in disengaged position
- c Push clutch/brake pedal down firmly (Fig. 14).
- d Start engine (page 12).
- With engine running and warm place throttle control midway between "S" (slow) and "F" (fast) position
- f Engage mower with the attachment clutch switch
- g Move gear shift lever to desired gear
- h Lower mower into cutting position using attachment lift lever.
- Release clutch/brake pedal to start movement (Fig. 14).
-). Move throttle control to "F" (Fast) postion.

 NOTE: SELECT A GROUND SPEED THAT WILL SUIT
 THE TERRAIN, QUALITY OF CUT AND ATTACHMENT
 BEING USED (TABLE 1).

OPERATION



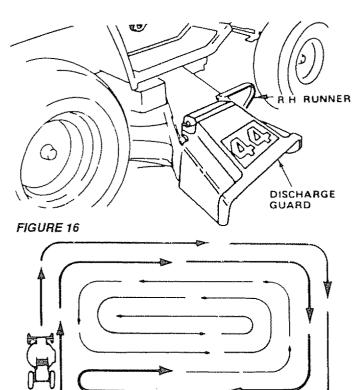


FIGURE 17

4 Mowing Tips

NOTE: TIRE CHAINS CANNOT BE USED WITH THE MOWER HOUSING ATTACHED.



READ THE "SAFETY RULES" CAREFULLY BEFORE OPERATING YOUR MOWER. REFER TO PAGE 2.

Use the runner on the R.H. side as a guide; the blade cuts approximately 2.54 cm (1 inch) outside the runner (Fig. 16).

- b. Drive so that clippings are discharged onto the area that has been cut. Have the cut area to the right of the machine. This will result in a more even distribution of clippings and more uniform cutting.
- C When mowing large areas (Fig. 17), start by turning to the right so that the clippings will discharge away from shrubs, fences, driveways, etc. After one or two rounds, mow in the opposite direction making left hand turns until finished.
- d. If grass is extremely tall, it should be mowed twice. The first time cut relatively high, the second time to the desired height.
- e The left hand side of mower should be used for trimming
- f Do not mow tall, dry grass over 15.25 cm (6 inches) tall. It is a fire hazard.
- 5 Operating The Tractor On Hills



DO NOT DRIVE UP OR DOWN HILLS WITH SLOPES GREATER THAN 15° AND DO NOT DRIVE ACROSS ANY SLOPE. REFER TO PAGE 55.

- a Move gear shift lever to "1ST" gear before starting up or down hills
- b AVOID STOPPING OR SHIFTING ON HILLS
- c If slowing is necessary, move throttle control lever to slower position.



LEAVE ENOUGH ROOM WHEN STOP-PING AND STARTING TO ALLOW SLIGHT TRACTOR ROLL DOWNHILL AS CLUTCH/ BRAKE PEDAL MOVES THROUGH CLUTCH POSITION.

- d If stopping is absolutely necessary push clutch/brake pedal quickly to brake position and engage parking brake
- e To restart tractor movement, make sure tractor is in the lowest speed range ("1ST" Gear) and that you have allowed room to roll slightly downhill. Depress clutch/brake full. Disengage parking brake and release clutch/brake pedal SLOWLY to start tractor movement.
- f Make all turns gradually

6 Flip-Up Discharge Guard

Your mower has a flip-up discharge guard (Fig. 16) for door or gate clearance when held in raised position



MAKE SURE ATTACHMENT CLUTCH SWITCH IS IN "DISENGAGED" POSITION AND BLADES HAVE STOPPED BEFORE RAISING DISCHARGE GUARD (DEFLECTOR). NEVER OPERATE MOWER WITHOUT DISCHARGE GUARD IN OPERATING POSITION.

To keep your tractor running better, longer, perform necessary service using the following maintenance schedule:

BEFORE MAKING ANY INSPECTION ADJUSTMENT OF REPAIR:

- 1 PUSH TRACTOR CLUTCH BRAKE PEDAL COMPLETELY INTO BRAKE POSITION
- 2 MOVE GEAR SHIFT LEVER TO NEU-TRAL" POSITION.
- 3 PLACE PARKING BRAKE IN ENGAGED POSITION REMOVE FOOT FROM PEDAL



- 4 PLACE ATTACHMENT CLUTCH SWITCH IN DISENGAGED POSITION
- TURN IGNITION KEY TO OFF POSI-TION
- 6 MAKE ABSOLUTELY SURE THE BLADES AND ALL MOVING PARTS HAVE COM-PLETELY STOPPED
- 7 REMOVE THE IGNITION KEY
- B DISCONNECT THE SPARK PLUG WIRES FROM THE SPARK PLUGS AND KEEP AWAY FROM THE SPARK PLUGS TO PREVENT INJURY FROM ACCIDENTAL STARTING. BE CAREFUL TOO AVOID TOUCHING HOT ENGINE OR MUFFLER COMPONENTS

With Every Mowing

- 1. Make sure all nuts on bolts are tight and cotter pins and retainer springs are secure
- 2. Observe all safety precautions
- 3. Keep tractor well lubricated (refer to page 19).

First 2 Hours (Two Mowings)

1. Change Engine Oil

Changing oil after the first two hours (or two mowings) will help eliminate break-in residue which might be damaging to your engine.

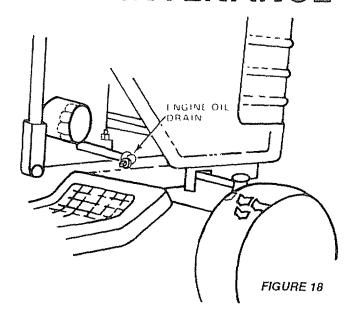
NOTE: BE CAREFUL NOT TO ALLOW DIRT TO ENTER THE ENGINE WHEN CHANGING OIL.

- a. Drain oil with engine warm.
- b. Loosen oil drain plug (Fig. 18) and remove dipstick (Fig. 19).
- c. Catch oil in a suitable container.
- d. Tighten oil drain plug.
- e. Refill engine oil (see chart at right). Refill capacity without oil filter change is 3-1/2 pints (1.7 litres). With oil filter change (page 18), capacity is 4 pints (1.9 litres).

NOTE: DO NOT OVERFILL

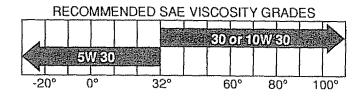
f. Replace dipstick (Fig. 19) then remove dipstick and read oil level. Make sure oil level is at the "FULL" mark on dipstick. Add or remove oil as indicated on dipstick.

MAINTENANCE



Recommended SAE Viscosity Grades

Determine temperature range expected before next oil change. All oil must meet A.P.I. service classification SD. SE or SF.



Dipstick assembly must be securely tightened into tube at all times when engine is operating

CAUTION: TO AVOID DAMAGE TO THE STARTING SYSTEM, USE SAE 5W30 OIL WHEN THE TEMPERATURE FALLS BELOW 0°C (32°F)

Every 5 Hours (Five Mowings)

1 Check Engine Oil Level



DO NOT CHECK ENGINE OIL LEVEL WITH ENGINE RUNNING

Several minutes after stopping engine, check engine oil level with tractor on level ground. Wipe dipstick (Fig. 19) clean, screw it down tight for a few seconds, remove and read oil level. If necessary, add oil until "FULL" mark is reached. (See chart above). NOTE: DO NOT OVERFILL.

MAINTENANCE

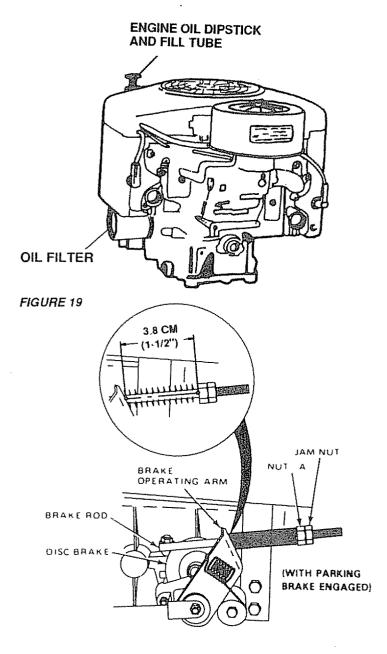


FIGURE 20

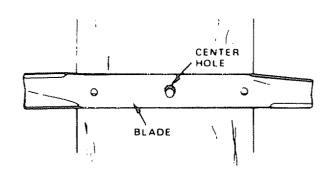


FIGURE 21

Every 25 Hours (Twice a Mowing Season)

1. Brake Adjustment

This Tractor is equipped with an adjustable brake system mounted on the right side of the transaxle (Fig. 20).



IF TRACTOR REQUIRES MORE THAN 1.8 METRES (SIX FEET) STOPPING DISTANCE IN HIGHEST GEAR, THEN BRAKE MUST BE ADJUSTED.

- Depress clutch/brake pedal and engage parking brake.
- Measure distance between brake operating arm and nut "A" on brake rod.
- c. If distance is other than 3.8 cm (1-1/2"), loosen jam nut (Fig. 20) and turn nut until distance becomes 3.8 cm (1-1/2"). Retighten jam nut against nut "A"

Road test tractor for proper stopping distance as stated above. Readjust if necessary.

2. Tire Care

- Maintain tire pressure in front at 14 PSI (1 Kg/cm²) and rear tires at 10 PSI (0.7 Kg/cm²).
- b Keep tires free of gasoline, oil, or insect control chemicals which can harm rubber.
- c. Avoid stumps, stones, deep ruts and other hazards that may cause tire damage.

3 Blade Sharpening

For best results mower blades must be kept sharp. The blades can be sharpened with a few strokes of a file or on a grinding wheel. We suggest they be sharpened after every 25 hours of mowing. Do not attempt to sharpen while on mower. If you mow in sandy soil check the blades after each two mowings. The sand wears the blades away rapidly.

- a When grinding care should be taken to maintain blade balance and the blade should be checked for proper balance before reinstallation on mower Unbalanced or bent blade will cause excessive vibration when running, and eventual damage to mower or engine Replace bent or damaged blades
- b. To check blade balance, drive a nail into a beam or wall. Leave about one inch (25.4 mm) of the straight nail exposed. Place center hole of clean blade over the head of the nail (Fig. 21). NOTE: CENTER HOLE OF BLADE ON NAIL. IF BLADE IS PROPERLY BALANCED, BLADE SHOULD REMAIN IN POSITION SHOWN IN FIG. 21. IF EITHER END OF THE BLADE MOVES DOWNWARD, BLADE IS NOT BALANCED. SHARPEN THE HEAVY END UNTIL BLADE IS BALANCED.

Every 50 Hours (Once a Mowing Season)

(Operating in dusty conditions may require more frequent servicing.)

1 Check Battery

- a Battery acid level in each battery cell should be even with bottoms of tubes in cells (Fig. 22). Add ONLY distilled water if necessary. NOTE: DO NOT OVERFILL
- b Keep battery and terminals clean
- c Keep battery bolts tight
- d Keep vent caps tight and small vent holes in caps open
- e Recharge at 6 amperes for 1 hour if necessary

NOTE: OVERCHARGING WILL SHORTEN BATTERY LIFE

2 Clean Battery and Terminals

Corrosion and dirt on the battery and terminals cause the battery to "leak" power



LEAD-ACID BATTERIES GENERATE EX-PLOSIVE GASES KEEP SPARKS, FLAME AND SMOKING MATERIALS AWAY FROM BATTERIES. ALWAYS SHIELD YOUR EYES AROUND BATTERIES.

- a Remove terminal guard
- b Disconnect BLACK battery cable then RED battery cable and remove battery from tractor
- c. Wash battery with 60 grams (1/4 cup) of baking soda to 3.8 litres (1 gallon) water.

NOTE: BE CAREFUL NOT TO GET THE SODA SOLUTION INTO THE CELLS.

- f Rinse the battery with plain water, dry and reinstall on tractor
- e Clean terminals and battery cable ends with wire brush until bright
- f Replace battery cables, connecting RED battery cable to positive terminal first, then BLACK battery cable to negative terminal. Coat terminal connections with petroleum jelly.
- g Replace terminal guard

3. Change Engine Oil

The best time to change engine oil is at the end of a day's operation when all dirt and foreign materials are suspended in the hot oil. See chart, page 15

(OPERATING IN DUSTY CONDITIONS MAY REQUIRE MORE FREQUENT SERVICING)

4. Clean Air Cleaner Foam Pre-Cleaner (Fig. 23)

- a. Remove Wing Nut and cover.
- Remove foam pre-cleaner element by sliding it off of the paper cartridge.
- Wash foam pre-cleaner in liquid detergent and water.
- d. Wrap foam pre-cleaner in cloth and squeeze dry.
- e. Lightly coat foam pre-cleaner with engine oil (Do not saturate). Squeeze in rag or towel to remove excess oil.
- Install foam pre-cleaner over paper cartridge. Reassemble cover and screw down tight.

MAINTENANCE

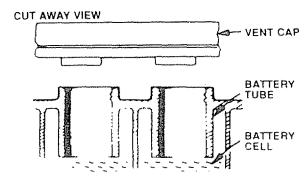


FIGURE 22

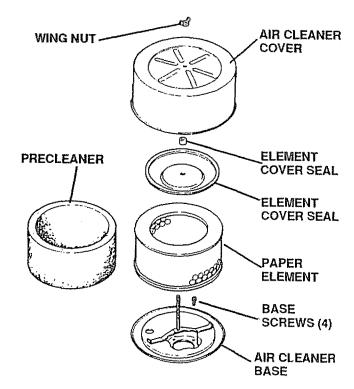


FIGURE 23

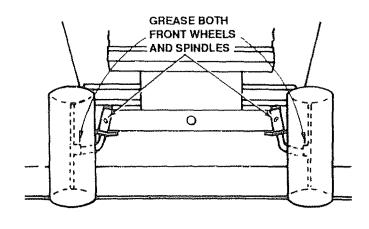


FIGURE 24

MAINTENANCE

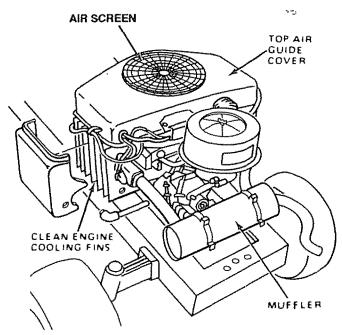


FIGURE 25

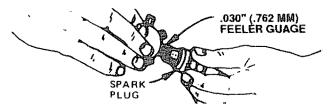


FIGURE 26

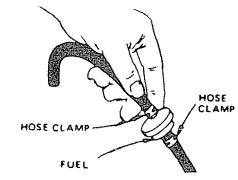


FIGURE 27

5. Lubricate Steering and Front Wheels

There is a grease fitting on each front wheel and axle spindle. Use a grease gun to give each grease fitting two shots of extreme pressure lubricating grease (available through your Sears Service Center)(Fig. 24).

6. Oil Pivot Points

Place several drops of SAE 30 oil at points where metal parts move against each other, especially:

- a. Hood hinges.
- b. Shifter shaft points.

SEE LUBRICATION CHART, PAGE 19.

7. Clean Air Screen

Air screen (Fig. 25) must allow free-flow of air to prevent engine damage from overheating. Clean with a wire brush, compressed air or water pressure to remove dirt, chaff, stubborn dried gum and fibers.



ALWAYS WEAR SAFETY GLASSES WHEN USING COMPRESSED AIR. DO NOT TOUCH HOT MUFFLER, CYLINDER OR FINS AS CONTACT MAY CAUSE BURNS.

8. Inspect Muffler

Inspect and replace corroded muffler as it could create a fire hazard and/or damage (Fig 25).

9. Clean Engine Cooling Fins

Remove any dust, dirt or oil from engine cooling fins to prevent engine damage from overheating. Air guide covers must be removed (Fig. 25). Remove bolts to remove side and top covers. See "HOOD REMOVAL," page 21.



DO NOT TOUCH HOT MUFFLER, CYLINDER OR FINS AS CONTACT MAY CAUSE BURNS.

Every 100 Hours



DISCONNECT SPARK PLUG WIRES TO PREVENT ACCIDENTAL STARTING BEFORE MAKING ANY INSPECTION, ADJUSTMENT OR REPAIR (EXCEPT CARBURETOR). BE CAREFUL TO AVOID TOUCHING HOTENGINE OR MUFFLER COMPONENTS.

1. Replace Spark Plugs

Replace spark plugs at the beginning of each mowing season or every 100 hours, whichever comes first. Gap should be set at 0.030" (0.762 mm). (Fig. 26).

2. Replace Air Cleaner Paper Cartridge

Refer to page 17.

3. Replace In-Line Fuel Filter

If fuel filter is clogged, obstructing fuel flow to carburetor, replacement is required.

- a. With engine cool, remove filter and plug fuel line sections as removed from both ends of fuel filter (Fig. 27).
- b. Place new fuel filter in position in fuel line. Be sure there are no fuel line leaks and that fuel line is in proper position in hose clamps.



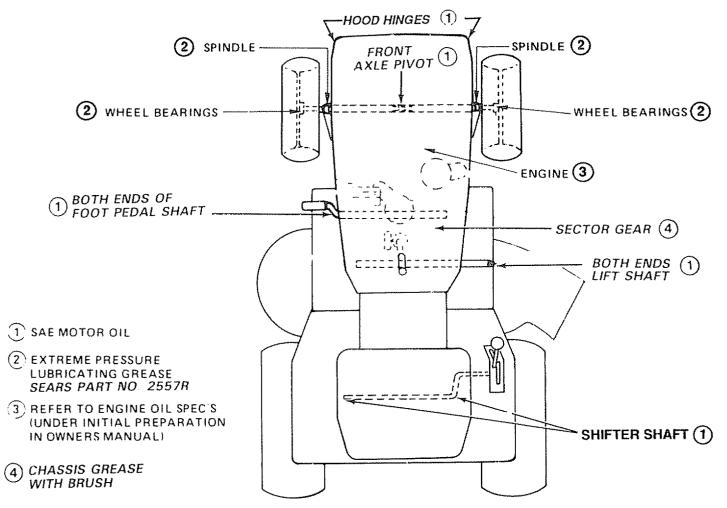
BESURE THERE ARENO FUEL LINE LEAKS AND THAT FUEL LINE IS IN PROPER POSITION IN HOSE CLAMPS.

4. Change Engine Oil Filter

- Drain crankcase of oil (refer to "CHANGE ENGINE OIL," page 15, through step d). Remove old filter (Fig. 19) by turning counterclockwise.
- Before installing new filter, apply a thin coating of oil on surface of the rubber seal.
- c Install new filter by turning clockwise until rubber seal contacts the filter adapter, then tighten the filter an additional 1/2 turn.
- d. Refill crankcase with engine oil (see page 15 for oil specifications). Add an additional 1/2 pint (.24 litres) oil for the new filter capacity.
- Start the engine. Check for and correct any oil leaks.

MAINTENANCE

Lubrication



REPAIR & ADJUSTMENT

FOR ANY ADJUSTMENTS, INSPECTION OR MAINTENANCE:

- 1 PUSH TRACTOR CLUTCH/BRAKE PEDAL COMPLETELY INTO BRAKE POSITION
- 2 MOVE GEAR SHIFT LEVER TO NEUTRAL POSITION
- 3 PLACE PARKING BRAKE IN 'ENGAGED PO-SITION REMOVE FOOT FROM PEDAL
- 4 PLACE ATTACHMENT CLUTCH SWITCH IN DISENGAGED' POSITION
- 5 TURN IGNITION KEY TO OFF POSITION
- 6 MAKE ABSOLUTELY SURE THE BLADES AND ALL MOVING PARTS HAVE COM-PLETELY STOPPED
- 7 REMOVE THE IGNITION KEY
- 8 DISCONNECT THE SPARK PLUG WIRES FROM THE SPARK PLUGS AND KEEP AWAY FROM THE SPARK PLUGS TO PREVENT INJURY FROM ACCIDENTAL STARTING. BE CAREFUL TOO AVOID TOUCHING HOT ENGINE OR MUFFLER COMPONENTS

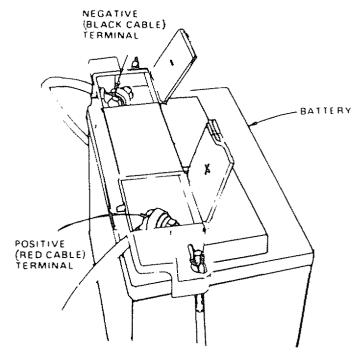


FIGURE 28



LEAD-ACID BATTERIES GENERATE EXPLOSIVE GASES. KEEP SPARKS, FLAME AND SMOKING MATERIALS AWAY FROM BATTERIES. ALWAYS WEAR EYE PROTECTION WHEN AROUND BATTERIES.

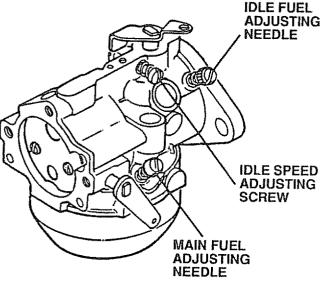
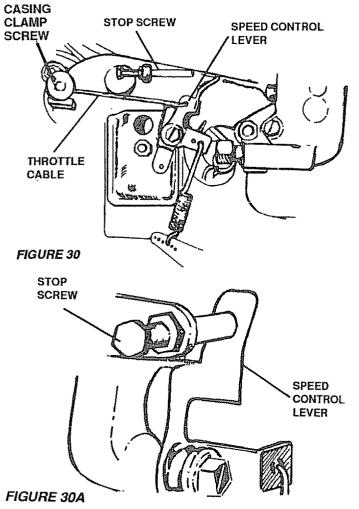


FIGURE 29



1. Starting your Tractor With a Weak Battery

If your battery is too weak to start the engine, it should be recharged. If "jumper cables" are used for emergency starting, follow this procedure:

NOTE: YOUR TRACTOR IS EQUIPPED WITH A 12 VOLT NEGATIVE GROUNDED SYSTEM. THE OTHER VEHICLE MUST ALSO BE A 12 VOLT NEGATIVE GROUNDED SYSTEM.

- Connect each end of the RED jumper cable to the POSITIVE(+) terminals of each battery (taking care not to short against chassis). (Fig. 28)
- b. Connect one end of the **BLACK** jumper cable to the NEGATIVE (–) terminal of fully charged battery.
- c. Connect the other end of the **BLACK** jumper cable to the L.H. side panel bolt (Fig. 14) NOTE: KEEP AWAY FROM GAS TANK AND BATTERY.
- d. Disconnect cables in reverse order:
 - 1. L.H. side panel bolt (Fig. 14)
 - Negative terminal of fully charged battery
 - 3. Positive terminals



DO NOT USE YOUR TRACTOR BAT-TERY TO START OTHER VEHICLES.

2 Throttle Control Cable Adjustment

Never attempt to change maximum engine speed. This is preset at the factory (3600 rpm± 75 rpm) and should only be changed by a qualified service technician who has the necessary equipment.

- a. Remove hood (Fig. 32).
- b. Loosen casing clamp screw (Fig. 30) until throttle cable is free to move.
- c. Move throttle control (on dashboard) to "FAST" position.
- Pull throttle cable tight (until speed control lever (Fig. 30A) is against stop screw (Fig. 30A). Retighten casing clamp screw.



REFER TO "STARTING THE ENGINE," PAGE 12.

3. Carburetor Adjustment

In general, turning the adjusting needles (Fig. 29) in (clockwise) decreases the supply of fuel to the carburetor. This gives a leaner fuel/air mixture. Turning the adjusting needles (Fig. 29) out (counterclockwise) increases the supply of fuel to the carburetor. This gives a richer fuel/air mixture. Setting the needles midway between the lean and rich positions will usually give the best results.

Adjust the carburetor as follows:

- a. With the engine stopped, turn the idle fuel adjusting needle in (clockwise) until it bottoms lightly. NOTE: The tip of the idle fuel and main fuel adjusting needles are tapered to critical dimensions. Damage to the needles and the seats in carburetor body will result if the needles are forced.
- b Preliminary settings: Turn the adjusting needles out (counterclockwise) from lightly bottomed. Turn the idle 1-1/4 turns, turn the main 1 turn.
- c. Start the engine and run at half throttle for five to ten minutes to warm up. The engine must be warm before making final settings (Steps d, e, f, and g).
- d. Place the throttle into the "fast" position.

- Turn the main fuel adjusting needle out (counterclockwise) from the preliminary setting until the engine speed decreases (rich).
- Now turn the adjusting needle in (clockwise).
 The engine speed may increase, then it will decrease as the needle is turned in (lean).
- 3. Now set the adjusting needle midway between the rich and lean settings.
- e. Idle Speed Setting: Place the throttle control into the "idle" or "slow" position. Set the idle speed to 1200 rpm adjusting screw in or out.
- f. Idle Fuel Needle Setting: Place the throttle into the "idle" or "slow" position.
 - 1. Turn the idle fuel adjusting needle out (counterclockwise) from the preliminary setting until the engine speed decreases (rich)
 - 2. Now turn the adjusting needle in (clockwise). The engine speed may increase, then it will decrease as the needle is turned in (lean).
 - Set the adjusting needle midway between the rich and lean settings.
 - 4. Recheck the idle speed. Readjust the speed as necessary.

4 Fuse Replacement

Replace with 30 amp automotive-type plug in fuse. Fuses can be purchased at all Sears Service Centers and most retail stores. Fuse is located directly behind dash.

5. Hood Removal

- a. Lift hood Disconnect headlight wiring connection (Fig. 32).
- b. Unscrew one screw at rear of each side panel (Fig. 31)
- Pivot hood and side panel forward and lift off tractor (Fig. 32).
- d. To replace, reverse above procedure

6. Mower Adjustment

Adjust the mower while tractor is parked on level ground or driveway. Make sure tire pressures are 1 Kg/cm² (14 PSI) in front and 0.71 Kg/cm² (10 PSI) in rear. If tires are over or under inflated, you will not properly adjust your mower.

FOR ANY ADJUSTMENTS INSPECTION OR MAINTENANCE:

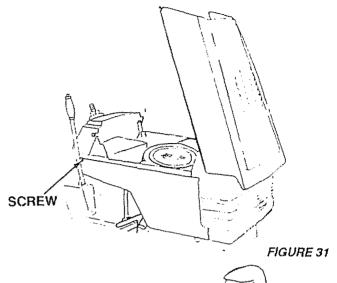
- PUSH TRACTOR CLUTCH BRAKE PEDAL COMPLETELY INTO "BRAKE" POSITION
- 2 MOVE GEAR SHIFT LEVER TO "N" (NEUTRAL) POSITION
- 3 PLACE PARKING BRAKE IN ENGAGED POSITION REMOVE FOOT FROM PEDAL
- 4 PLACE ATTACHMENT CLUTCH SWITCH IN DISENGAGED POSITION

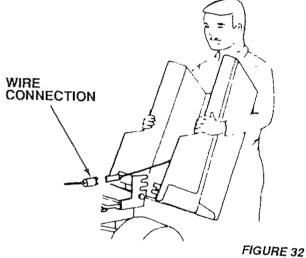


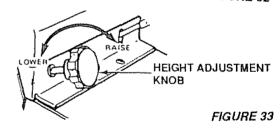
- TURN IGNITION KEY TO OFF POSITION MAKE ABSOLUTELY SURE THE BLADES AND ALL MOVING PARTS HAVE COMPLETELY STOPPED
- 7 REMOVE THE IGNITION KEY
- DISCONNECT THE SPARK PLUG WIRE(S) FROM THE SPARK PLUG(S) AND KEEP WIRE(S) AWAY FROM THE PLUG(S) TO PREVENT INJURY FROM ACCIDENTAL STARTING BE CAREFUL TO AVOID TOUCHING HOT ENGINE OR MUFFLER COMPONENTS

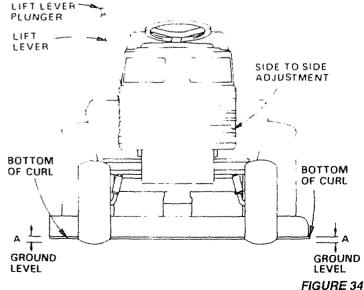
Height Adjustment

Adjustment for mower height is made with the height adjustment knob. Raise mower cutting height by turning height adjustment knob clockwise () Lower mower cutting height by turning height adjustment knob counterclockwise () (Fig. 33)









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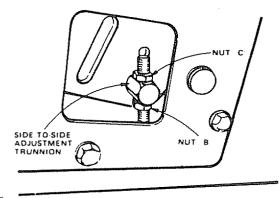
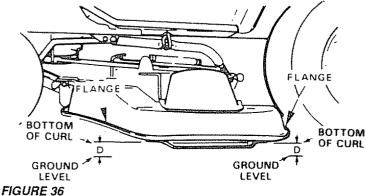
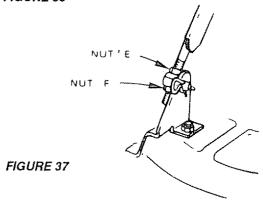
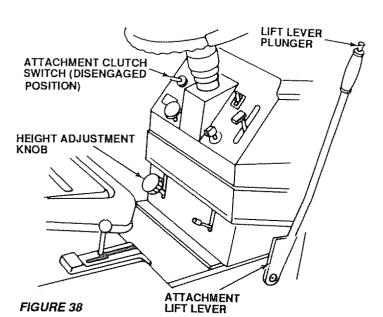


FIGURE 35







Side-to-Side mower Adjustment

- a Depress lift lever plunger and use lift lever to raise mower to maximum cutting height (Fig. 34).
- Measure height from bottom of curl to ground level at front of mower. Distance "A" should be the same (Fig. 34).
- c If distance "A" needs to be changed, snap out access hole cover on L.H. side above footrest Use 11/16" wrench on nuts "B" and "C" at side-to-side adjustment trunnion (Fig. 35).
- d. To raise left side of mower, loosen nut "B" and tighten nut "C".
- e To lower left side of mower, loosen nut "C" and tighten nut "B"

NOTE: ONE ROTATION OF ADJUSTMENT NUTS IS EQUIVALENT TO APPROXIMATELY 5 MM (3/16") HEIGHT CHANGE.

f Be sure all nuts are securely tightened.

Front-To-Rear Mower Adjustment

To obtain the best cutting results, your mower housing should be adjusted so the front and rearflange distance "D" (Fig. 36) is 13 mm (1/2") lower in front when the mower is positioned in the highest cutting position.

NOTE: MEASURE DISTANCE "D" FROM GROUND LEVELTO BOTTOM OF CURL ON RIGHT REAR FLANGE AND COMPARE TO DISTANCE "D" AT RIGHT FRONT FLANGE

- b. To raise rear of mower, loosen nut "E" on both rear suspension arms. Screw both nuts "F" up an EQUAL NUMBER OF TURNS (Fig. 41).
- c When distance "D" is 13 mm (1/2") lower at front than rear, tighten nuts "E".
- d To lower rear of mower, loosen nut "F" on both rear suspension arms an EQUAL NUMBER OF TURNS (Fig. 37).
- e When distance "D" is 13 mm (1/2") lower at front than rear, retighten nuts "E"

NOTE: WHEN ADJUSTING REAR SUSPENSION TRUN-NIONS, ALWAYS ADJUST BOTH EQUALLY SO MOWER WILL STAY LEVEL

Mower Drive Belt Removal

NOTE: MOWER BELT INSTALLATION DECAL LO-CATED ON MOWER HOUSING



REPLACE ONLY WITH THE BELTS SPECIFIED IN THIS MANUAL.

- a Place attachment clutch switch in "Disengaged" position (Fig. 38).
- b Turn height adjustment knob to its lowest position. Move attachment lift lever (Fig. 38) forward to lower mower to its lowest position
- Roll belt off engine pulley (Fig. 39).
- d. Pull belt off both mower pulley and idler pulleys (Fig. 40)
- To replace mower drive belt, reverse above procedure.

NOTE: MAKE SURE DRIVE BELT IS ENGAGED IN ALL PULLEYS.

7. Mower Removal

- a. Remove mower drive belt. (See "MOWER DRIVE BELT REMOVAL," page 22, through step 3.)
- b. Pull belt off engine pulley (Fig. 39).
- Pull retainer springs out of rear suspension trunnions. Remove rear suspension trunnions from lift brackets (Fig. 41)
- d. Pull retainer spring out of rear hinge pin. Remove rear hinge pin (Fig. 41).
- e. Pull retainer spring out of front hinge pin. Remove front hinge pin (Fig. 41) and parallel link.
- Use lift lever to raise suspension arms. Slide mower out from under tractor.

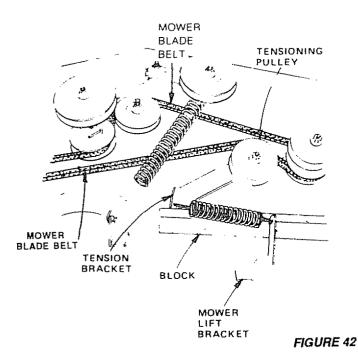


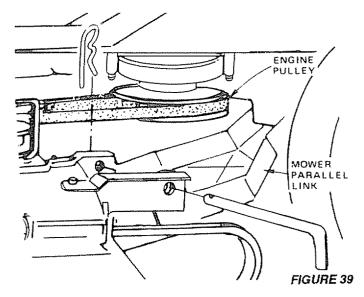
BEFORE DRIVING YOUR TRACTOR, IN-STALL MOWER OR REMOVE PARALLEL LINK (FIG. 41).

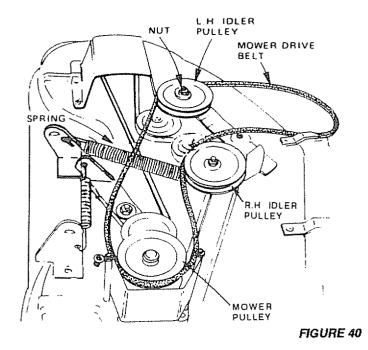
NOTE: IF AN ATTACHMENT OTHER THAN THE MOWER DECK IS TO BE MOUNTED ON THE TRACTOR, THE L.H. AND R.H. SUSPENSION ARMS (FIG. 41) SHOULD BE REMOVED.

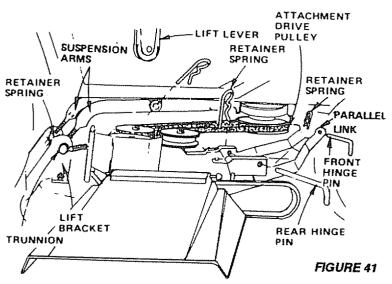
8. Mower Blade Drive Belt Replacement

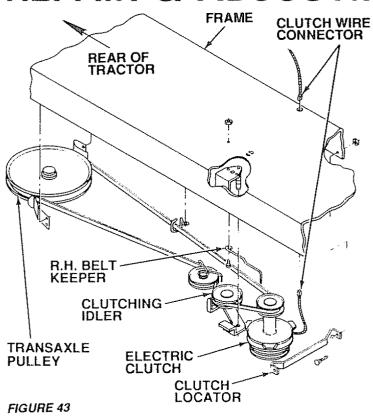
- a. Remove mower drive belt. (See page 22.)
- Bemove mower from tractor. (See "MOWER REMOVAL," above.)
- c. Pull belt towards rear of mower at tensioning pulley (Fig 42). Place a block between tension bracket and mower lift bracket. Roll belt off tensioning pulley.
- d. Roll belt off all other pulleys.
- e. Slide belt from under spring.
- To install belt, reverse above procedure. Make sure belt is engaged in all pulleys.

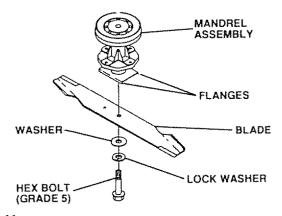












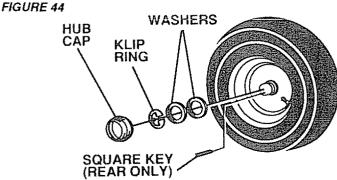


FIGURE 45



A GRADE 5 HEAT TREATED BOLT CAN BE IDENTIFIED BY THREE LINES ON THE BOLT HEAD AS SHOWN AT LEFT

9 Motion Drive Belt Replacement

NOTE: BELT INSTALLATION DECAL IS LOCATED UNDER LEFT FOOTREST.

- a. Remove mower (see "MOWER REMOVAL" page 23).
- b. Using a 1/2" wrench, remove the clutch locator (Fig. 43).
- c. Using a 9/16" wrench, loosen the right hand belt keeper (Fig. 43).
- d. Disconnect clutch wire connector. Push connector through frame (Fig. 43).
- e Pull belt off clutching idler and raise to top side of pulley.
- f Release parking brake. Push belt over and away from clutching idler
- g. Pull belt slack toward rear of tractor. Remove belt from transmission pulley by deflecting keepers to force belt up and out of pulley. (Use belt to push keepers away from pulley.) (Fig. 43)
- Work belt around remaining pulleys and keepers, working toward transaxle pulley
- j Pull belt forward off transaxle pulley and down over electric clutch
- h. Reinstall in reverse of above procedure.

Make sure right hand belt keeper is positioned correctly between locator tabs and electric clutch connection is secure.

10. Blade Replacement

Raise mower to highest position to permit access to blades or remove mower

- a Remove bolt, lockwasher and washer (Fig. 44) (turn counterclockwise)()
- b. Remove and discard old blade
- c Clean top and bottom of mower housing
- d Place new blade between flanges, (Install with sharp edge down), and secure with washer, lockwasher and bolt previously removed

11. Tire Care

- Maintain tire pressure in front at 14 PSI (1Kg/cm²) and rear tires at 10 PSI (0.7 Kg/cm²).
- b. Keep tires free of gasoline, oil, or insect control chemicals which can harm rubber.
- c. Avoid stumps, stones, deep ruts, sharp objects and other hazards that may cause tire damage.
- d. Removing wheel for tire repair (Fig. 45).
 - 1. Block up axle securely.
 - Remove hub cap, klip ring and washer to allow wheel removal (rear wheel contains a square key – Do Not Lose).
 - Repair tire and reassemble. Align slots in rear wheel hub and axle. Insert square key. Replace washer and snap klip ring securely in axle groove. Replace hub cap.

NOTE: USE GREASE FITTINGS TO LUBRICATE FRONT WHEELS WITH GENERAL PURPOSE GREASE APPLY AN ANTI-SEIZE OR GOOD GENERAL PURPOSE GREASE TO LUBRICATE REAR AXLES.



ALWAYS USE GRADE 5 HEAT TREATED BOLTS TO ATTACH BLADES.DONOTUSE PLATED BOLTS. CHECK BOLTS IN BLADES OCCASIONALLY TO MAKE SURE BOLTS ARE TIGHT. TORQUE BOLTS TO 41-47 N-m (30-35 FT.-LBS.).



WHEN MOUNTING TIRES, UNLESS BEADS ARE SEATED, OVER INFLATION CAN CAUSE AN EXPLOSION.

12. Rear Wheel Replacement

For rear wheel replacement, follow instructions under "TIRE CARE," page 24

Coat axle with grease to prevent corrosion or rust accumulation and eventual seizing of wheel hub to axle shaft.



WHEN REPLACING WHEELS ON THE TRACTOR THEY MUST BE MOUNTED WITH THE LONG HUB SIDE TOWARD THE CENTER OF THE TRACTOR INCORRECT INSTALLATION COULD AFFECT LATERAL STABILITY (SEE FIG. 46)

13. Transaxle Shifter Linkage Positioning and Adjustment

The transaxle should be in neutral when the gear shift lever is in the neutral (lock gate) position (Fig. 47). The adjustment is preset at the factory; however, if adjustment is needed, proceed as follows:

- a Make sure transaxle is in neutral
- Using a 7/16" wrench, loosen two (2) locknuts on tie rod (Fig. 48 - inset)
- c Turn center rod (Fig. 48 inset) until gearshift lever falls into neutral lock gate on fender console (Fig. 47)
- i Tighten locknuts securely

14 Storage

Remove mower from tractor for winter storage. When mower is to be stored for a period of time, clean it thoroughly, remove all dirt. grease, leaves, etc., give blades and underside of housing a good coat of grease or rust preventative. Store in a clean dry area

a Fuel System

It is important to prevent gum deposits from forming in essential fuel system parts such as the carburetor, fuel filter, fuel hose, or tank during storage. Also, experience indicates that alcohol blended fuels (called gasohol or using ethanol or methanol) can attract moisture which leads to separation and formation of acids during storage. Acidic gas can damage the fuel system of an Engine while in storage. To avoid engine problems, the fuel system should be emptied before storage of 30 days or longer.

b Engine Oil

Drain (with engine warm) oil and replace with clean engine oil. (see chart on page 15)

c Cylinders

- 1 Remove spark plugs
- Pour 29.5 ml (one ounce) of oil through spark plug hole into cylinder
- Turn ignition key to "START" position for a few seconds to distribute oil
- 4. Replace with new spark plugs

d Battery

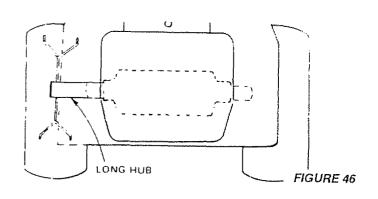
- 1. Prior to storage, clean terminals and top of battery
- 2. Disconnect cable from positive side of battery

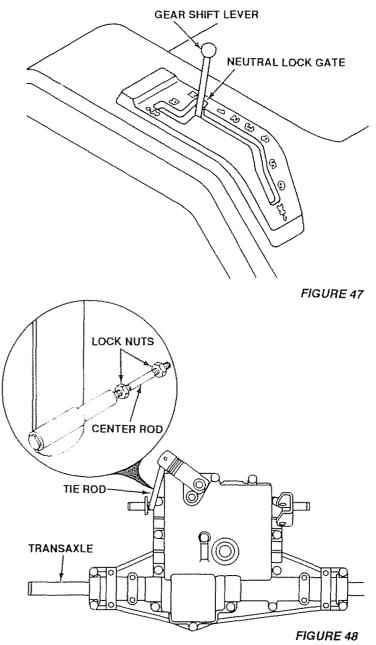
After a period of time in storage, battery may require recharging.

e General Cleaning

Clean engine, battery, seat, finish, etc. of all foreign matter

f Store in a clean, dry area





TROUBLESHOOTING

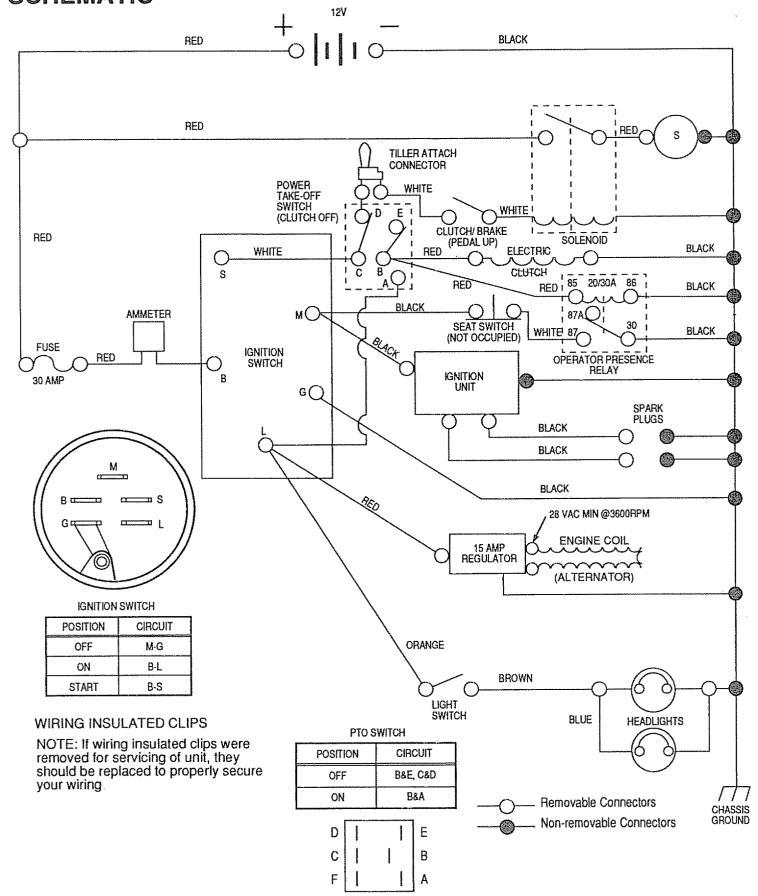
PROBLEM	CAUSE / REMEDY (SEE INDEX)
WILL NOT START	Fill Tank with Gasoline. Check Fuel Line and Carburetor (clean if necessary). Replace Fuel Filter. Use Fresh Fuel Recharge or replace Battery Check Wiring Replace Spark Plug(s) and adjust gap Drain and replace oil for proper temperature
WILL NOT TURN OVER	Push Clutch/Brake Pedal into brake position Charge or replace Battery Move Attachment ClutchSwitchto "DISENGAGED" position Replace Ignition Switch Replace Interlock Switch(es) Replace Solenoid or Starter Replace Fuse Check all Wire Connections and "Ground" Points Reattach Tiller Attachment Wire Loop
ENGINE CLICKS BUT WON'T START	Clean Battery Terminals Replace Starter or Solenoid Charge or Replace Battery Check Wire Connections and "Ground" Points
HARD TO START	Place Throttle Control in "FAST" position and run starter several times to clear out gas Remove Air Filter and clean Replace Spark Plug(s) and adjust gap Recharge or replace Battery Check the Wiring Drain Fuel Tank and Carburetor. Use Fresh Fuel Replace Fuel Filter Make necessary adjustments to Carburetor Major Engine Overhaul
ENGINE MISSES OR LACKS POWER	Shift to a lower gear or reduce load Drain Gas Tank and Carburetor Use Fresh Fuel Remove and clean Air Cleaner Make necessary carburetor adjustments Clean Air Screen Add or change oil Replace Spark Plug(s) and adjust gap Replace Fuel Filter Major Engine Overhaul
ENGINE OVERHEATS	Shift to lower gear or reduce load Clean Air Screen Add or change oil Clean Engine Cooling Fins Remove and clean Muffler or replace Remove and clean Air Filter Use fresh fuel and adjust Carburetor
NO LIGHTS	Check Fuse, Switch and Wire Connections Replace Headlight Bulbs Replace Switch
WON'T CHARGE	Check Fuse for fault and replace Replace Battery Replace Diode Assembly Replace Alternator
OPERATOR PRESENCE SYSTEM WILL NOT SHUT DOWN ENGINE WHEN OPERATOR LEAVES SEAT NOTE: This tractor is equipped with an operator presence sensing system. Any attempt by the operator to leave the seat with the engine running and the attachment clutch engaged will shut down the engine.	Check all Wire Connections Check Seat Switch

TROUBLESHOOTING

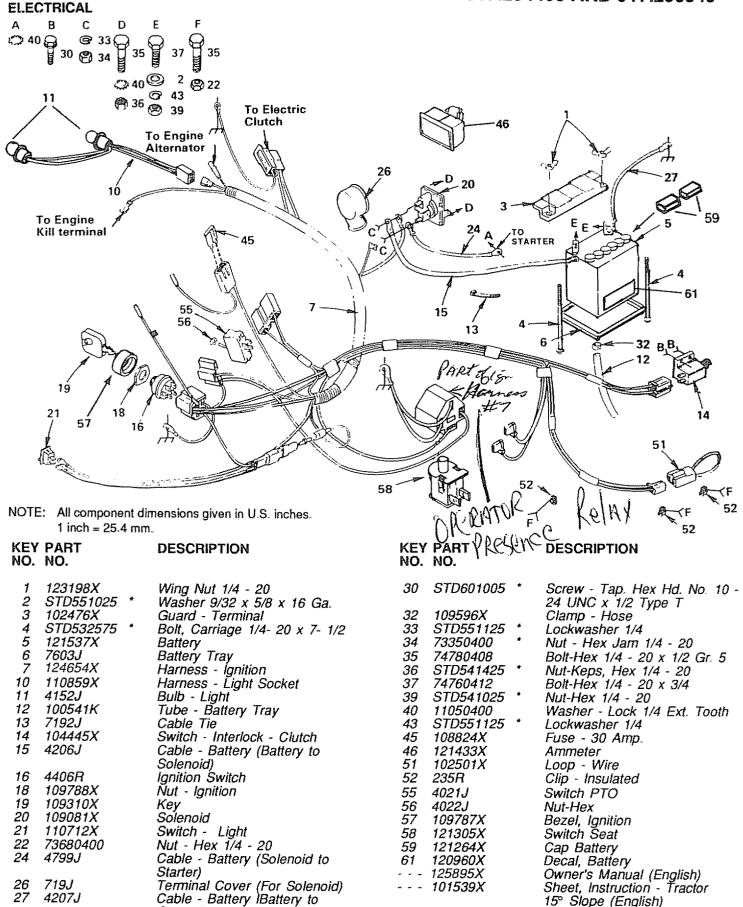
UNSATISFACTORY MOWER PERFORMANCE UNEVEN DISTRIBUTION OF CLIPPINGS	Move Throttle Control to "FAST" Check air pressure in Tires Check front-to-rear and side-to-side Mower adjustment Use a slower ground speed Replace Mower Blades Reinstall Mower Blades with Top of Blade up Clean underside of Mower Deck Readjust Mower Drive Belt
MOWER BLADES WILL NOT ROTATE	Correct Clutch Mechanism Interference Install new Mower Drive Belt Reinstall Mower Drive Belt Adjust Mower Drive Belt Replace frozen Mandrel Replace frozen Idler Pulley
EXCESSIVE MOWER VIBRATION	Replace bent or unbalanced Blades Replace Mandrel Straighten Deck or replace
WIND ROWING STRIPPING OR DROPPING OF GRASS CLIPPINGS	Set Throttle for maximum engine speed Let grass dry out Clean underside of Mower Deck Readjust Mower front-to-rear and side-to-side Replace Blades
UNEVEN CUT OR SCALPING	Readjust Mower front-to-rear and side-to-side Replace Blades , Replace bent Mandrel(s)

SERVICE RECORD				5/1	85/0	JP3	NPS	NOV		SPS			
FILL IN DATES AS YOU COMPLETE REGULAR SERVICE		RST	HOUTE	SHOW VERY	RS HO 25 HO VERY	JRS 50 HC VERY	185 100 1ER	200	SER	VIC	E D	ATE	S
Change Engine Oil				V					*****				
Check Brake Operation			d			.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,							
Check Tire Pressure		W				ļ							
Clean Air Screen													~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
Clean Air Cleaner													
Lubricate Pivot Points (see page 24)				V									
Check Battery Level and Recharge								-					
Clean Battery and Terminals													****
Carburetor Adjustment			M										,
V-Belt Adjustment													
Clean Engine Cooling Fins													
Check Muffler	A COMPANY												
Replace Air Cleaner Paper Cartridge													
Replace Spark Plug	or manager												
Change Engine Oil Filter													
Replace Fuel Filter					M								

20 H.P. GARDEN TRACTOR - MODEL NUMBER 917.254460 AND 917.250040 SCHEMATIC



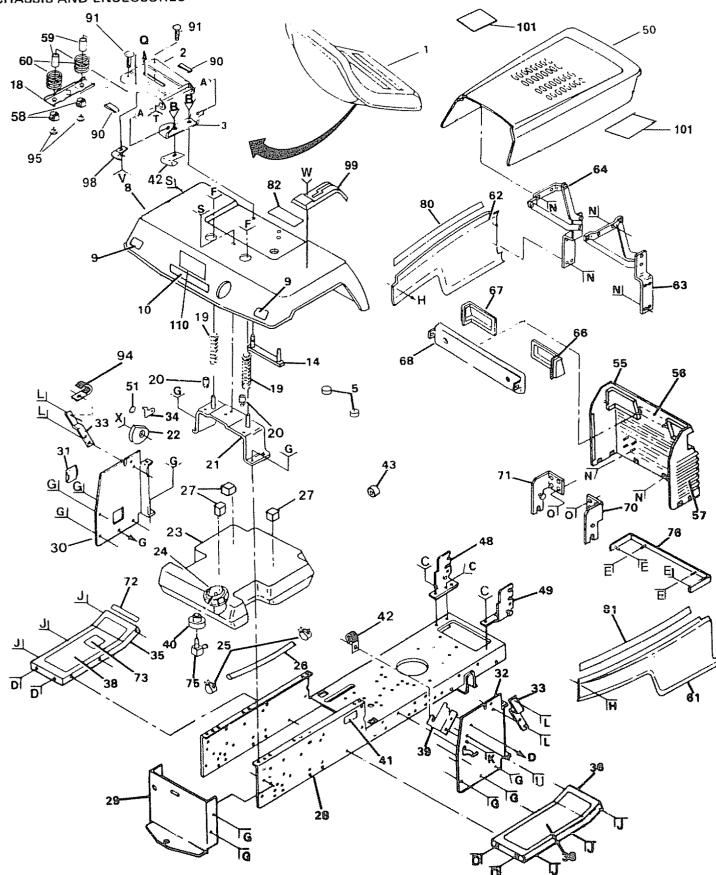
20 H.P. GARDEN TRACTOR - MODEL NUMBER 917.254460 AND 917.250040



Ground)

20 H.P. GARDEN TRACTOR - MODEL NUMBER 917.254460 AND 917.250040

CHASSIS AND ENCLOSURES



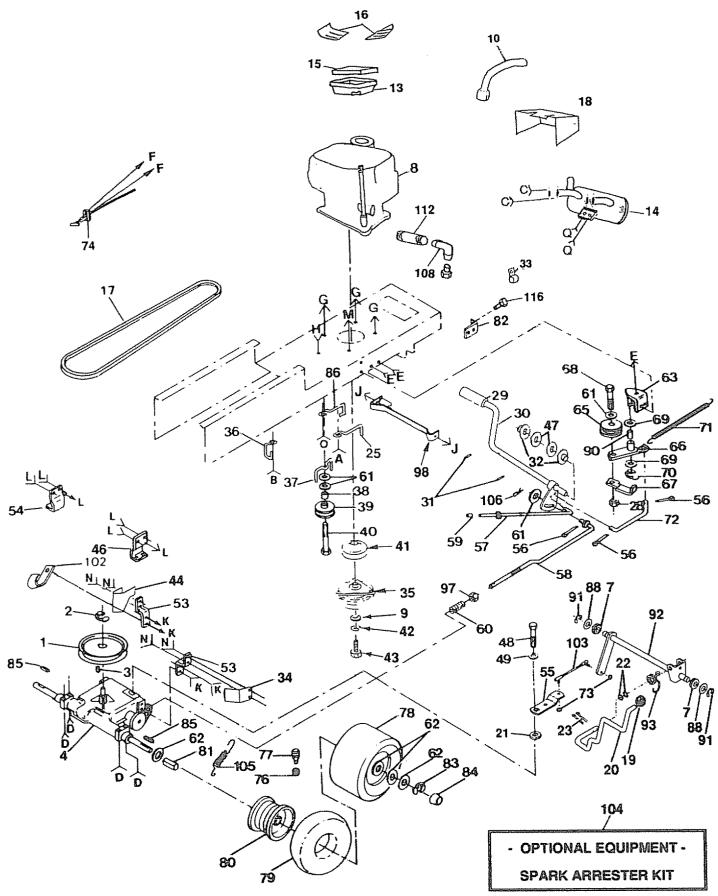
20 H.P. GARDEN TRACTOR - MODEL NUMBER 917.254460 AND 917.250040

NOTE: All component dimensions given in U.S. inches -CHASSIS AND ENCLOSURES 1 inch = 25.4 mm**DESCRIPTION KEY** PART DESCRIPTION PART **KEY** NO NO. NO. NO. 121248X Bushing, Snap 58 1 120066X Seat 121249X Spacer, Split 59 Pan - Seat 2 124294X Spring, Compression 121250X Bracket - Pivot - Seat 60 3 105513X 108403X Panel - Side - R H Bolt - Shoulder 5/16 - 18 4 105529X 62 108410X Panel Side LH 5 124238X Cap - Spring 126432X 63 Hinge RH Nut - Lock 5/16 - 18 6 73680500 126431X 64 Hinge LH 7 73680600 Nut - Lock 3/8 - 16 Lens RH 66 106003X 8 Fender 123784X 106004X Lens LH 67 9 Reflector - Rear 106202X 110897X 68 Bezel - Headhght 10 105801X Decal 70 108512X Bracket Pivot R H Screw, Hex Washer Thd Roll 17490612 11 71 108513X Bracket Pivot L H 3/8-16 x 3/4 Decal - Clutch Brake 72 4900J Washer 13/32 x 13/16 x 12 Ga 12 19131312 7.3 109199X Decal - Drive Belt STD523707 Bolt, Hex. 3/8-16 x 3/4 1.3 74760612 Bolt - Hex 3 8 16 x 3/4 74 Strap - Fender 105511X 14 75 Stem - Tank Fuel 8710J Nut. Fin. Hex 1/4 - 20 15 73220400 76 110350X Strap Assembly Grill Washer 17/32 x 1-3/16 x 12 Ga. 16 19171912 79 Washer, Neoprene 11050600 Washer Lock Ext Tooth 3/8 17 120684X 80 106813X Decal - Stripe Side Panel, L.H. Bracket, Switch - Seat 121246X 18 81 106814X Decal - Stripe, Side Panel, R.H. Compression - Spring R H 19 124181X Nut, Push 106974X 8.2 Decal Caution 20 105531X 17490608 83 Bolt, Hex Washer Thread Rolling 3/8 -Bracket - Fender 21 105509X Scale, Height Indicator 16 X 1/2 22 123934X 19131614 85 Washer 13 32 x 1 x 14 Ga Tank - Fuel 23 106020X 86 19060718 Washer 3/16 x 7/16 x 18 Ga. 123549X Cap Fuel 24 Clamp · Hose 87 106909X Screw - Special 25 123487X 88 106910X Washer Line - Fuel 26 8542FI 89 108402X U-Clip Pad - Spacer 27 106082X Strip, Foam 121251X Chassis Assembly 90 28 121277X 91 72170410 Bolt, Carr. 1/4 - 20 x 1-1/4 Drawbar 29 123785X 92 120068X Knob, Seat 30 124118X Panel - Dash - L.H 9.3 121144X Shoulder Bolt Cover, Access 121794X 31 94 Panel - Dash - R H. 5320R Clip - Insulated 32 110828X Bracket - Support - Dash 95 123976X Nut, Hex Large Flange 33 105525X Pointer, Height Indicator Screw - Sltd Pan Head #10 - 24 x 1/4 123933X 96 74641008 34 105465X Footrest - L. H. 35 97 73951000 Nut. Keps #10 - 24 Footrest - R H. 36 105464X 98 Clip. Insulated 4171R STD533707 *Bolt, Carr 3/8-16 x 3/4 37 99 123825X Console, Shifter 38 105466X Pad, Footrest 101 126313X Decal, Hood Bracket - Clutch - Mower 110923X .39 102 10100800 Washer, Lock Bushing 40 36451 103 74640806 Screw #8 x 3/8 Decal - 6 Speed 44" 105567X 41 104 74780516 Bolt, Hex 5/16 - 18 UNC x 1 Clip - Insulated 42 2751R 105 Washer 11/32 x 1 1/2 x 10 Ga. 19112410 Grommet, Split 43 110436X 106 10040500 Washer, Lock Bracket - Pivot - L H 109015X 48 Washer, Nylon 107 120529X Bracket - Pivot - R H 49 109016X 108 9151R Grommet 106013X017 Hood 50 120579X Pal Nut Decal, U.S.A. 109 123935X Plug, Hole 51 750211 Nut - Crownlock 1/4-20 52 73680400 Pal - Nut 54 108067X Grill 55 105528X L Ν 0 56 105806X Decal - Grill S 83 Decal - Stripe 57 105568X **3** 109 **(E)** 54 *STANDARD HARDWARE--PURCHASE LOCALLY 92 **@** 17 **16** W U V K J G D E Н 103 37 **③** 85 107 87 **{\$}**79 **©** 106 **@** 6 2) 102 © 88 @ 17 **@**12 **1**97 **23** 89 (2) 7 86

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20 H.P. GARDEN TRACTOR - MODEL NUMBER 917.254460 AND 917.250040

DRIVE

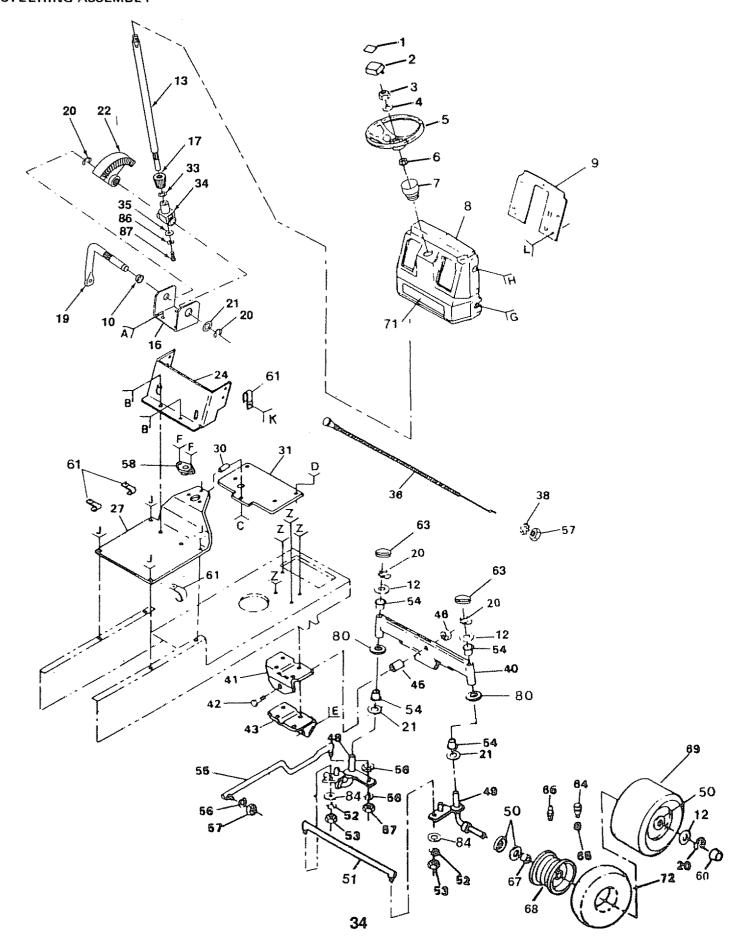


20 H.P. GARDEN TRACTOR - MODEL NUMBER 917.254460 AND 917.250040

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	IIVE				DART	DECODID	TION
KEY	PART		DESCRIPTION		PART	DESCRIP	IION
	NO.			NO.	NO.		
1	121327X		Pulley, Transaxle (Driven)	61	STD551037	* Wacher 13/	32 x 13/16 x 16 Ga.
2	12000004		Ring. Retainer	62	123800X		/32 x 1 - 5/8 x 16 Ga
3	2228M		Key, Woodruff #9	<i>63</i>	123102X	Bracket, Clu	
4	123797X		Transaxle, 6-Speed. Peerless	63 64	9TD533707		ge 3/8 - 16 x 3/4
~	ILUISIA		Model No. 143.820-016				•
5	STD533107	_	Bolt, Hex 5/16 - 18 x 3/4	65	123766X	Pulley, Idler	
6	19111214	•	Washer 11/32 x 3/4 x 14 Ga.	<i>66</i>	1 <i>23789X</i>	Arm, Idler	
	71208		Bushing, Rod. Steering	67	123205X	Retainer, Be	
7 8	125605X		Engine, 20 HP Kohler Model No. MV20S.	68	STD523715		8 -16 × 1-1/2
	72000071		Spec. No. 57517	69	110812X	Washer, Ha	rdened
0	100107V		Washer 15/32 x 1- 3/4 x 1/4	70	12000039	Ring, Clip	
9	126197X			71	1 <i>05709X</i>	Spring, Retu	ırn. Clutch
10	1 <i>25893X</i>		Tube Assembly. Exhaust	72	105710X	Link, Clutch	
			Do A Ale Meliter	73	<i>73530400</i>	Nut 1/4 - 28	
13	125762X		Duct, Air, Kohler	74	125726X	Control, Thr	ottle
14	125890X		Muffler	<i>75</i>	17720410	Screw, Hex,	Thread Cutting
15	123537X		Foam, Strip			1/4 - 20 x 5/	8
16	120511X		Bracket,Air Duct	<i>76</i>	59192	Cap, Valve	
17	123796X		V-Belt. Drive	77	65139	Stem, Valve	!
18	125891X		Shield, Heat Kohler Vertical Twin	78	124106X	Tire. Rear	
19	106933X		Knob	79	7154J		ırnished with
20	123781X		Rod, Shifter			Tractor)	
21	105701X		Washer, Shift Plate	80	124074X	Rim	
22	19171216		Washer 17/32 x 3/4 x 16 Ga	81	108097X	Spacer, Spl	it
23	STD561210		Pin, Cotter 1/8 x 1	82	108236X	Bracket, Sw	
24	17490612		Screw, Hex Washer Hd Thd	83	12000053	E-Ring	11011
** (17100012		Roll. 3/8 - 16 x 3/4	84	104757X	Cap Hub, R	nar
25	105730X		Keeper, Belt, Engine	85	9396E	Key Square	
26	STD523710	•	Bolt. Hex 3/8 - 16 x1				
27	19131312			<i>86</i>	121218X	Keeper, Bel	
28	STD541437		Washer 13/32 x 13/16 x12Ga	87	125991X	'Screw, Self	
29	8883R		Locknut 3/8 -16		40040040		- 16 x Î- 1/2
30			Cover, Foot Pedal	88	19212016		32 x 1 - 1/4 x 16 Ga
	122424X		Shaft, Foot Pedal	89	STD523707	Bolt Hex 3/8	3 - 16 x 3/4
31	1572H		Pin,Roll 3/16 x 1	90	105706X	Bearing	
32	120813X		Bearing, Nylon	91	12000008	Ring, Klip	
33	122758X		Clamp, Muffler	92	1 <i>23772X</i>	Shaft Asser	
34	123792X		Keeper, Belt, Transaxie. R.H.	93	123782X	Spring, Tors	sion
35	124648X		Clutch, Electric	94	STD551237		ck. Ext. Tooth 3/8
36	123788X		Retainer, Belt	95 97	19060916	Washer	
<i>37</i>	1 <i>09070X</i>		Keeper, Belt	<i>97</i>	STD541437	 Locknut 3/8 	- 16
38	4470J		Spacer	98	109169X	Retainer As	sembly, Clutch
39	123674X		ldler, Flat	101	17490512	Screw, Hex,	. Washer, Thd
40	STD523727	•	Bolt. Hex 3/8 - 16 x 2 - 3/4			Rolling 5/16	
41	124647X		Pulley, Engine	102	2751R	Clip, Fuel Li	
42	STD551143	•	Washer, Lock 7/16	103	123793X	Rod, Tie	
43	74610764		Bolt, Hex 7/16 - 20 x 4	104	126621X	Spark Arres	ter Kit
44	123791X		Keeper, Belt, Transaxle, L.H.	105	110422X	Spring, Brai	
45	74570512			106	4497H	Clip, Hair Pi	
46	123776X		Screw, Hex Socket 5/16 - 16 X 12 Ga. Bracket Transaxle, R H	108	13280336	Nipple, Pipe	
47	19211616			109	STD512505	Bolt, Hex 1/	
48	71040412		Washer 21/32 x 1 x 16 Ga. Bolt, Hex 1/4 - 28 x 3/4	110		* Washer, Lo	
49	STD551025		Washer 9/32 x 3/4 x 16 Ga.	111	STD551131	,	32 x 3/4 x 16 Ga.
			Washer, Lock Hvy. Helical Spring	112	STD551025 13200300	Elbow, Pipe	
50	STD551131			113	74760516		716 - 18 UNC x 1
51	STD541431		Locknut 5/16 - 18				
52	74780544		Bolt, Hex 5/16 - 18 x 2 - 3/4	114	19111212		32 x 3/4 x 12 Ga
53	123787X		Strap, Torque	115	STD541431		lock 5/16 - 18
54	123780X		Bracket, Transaxle. L.H.	116	STD601005	Screw, rap	Hex Hd #10 - 24 x 1/2
55	123794X		Shift Arm	+ 97	ΓΔΝΠΔΡΙΌ ΗΔΕ	WARF-PIII	RCHASE LOCALLY
56	STD561210	•	Pin, Cotter 1/8 x 3/4	01	יוחוי טווחטווחי	A COLUMN TO THE TOTAL TOTAL TO THE TOTAL TOTAL TOTAL TO THE TOTAL TOTAL TOTAL TO THE TOTAL TOTAL	TOT THOSE EDOCALET
57	125637X		Rod, Brake. Park		Mar Walt		iven in IIC inches
58	123786X		Rod, Brake	NO	i E: Ail compon	nt almension:	s given in U.S. inches -
59	124236X		Cap, Plunger		1 inch = 25	1 mm	
60	106888X		Spring, Rod. Brake		1 11()11 LO	T 111111	
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20 H.P. GARDEN TRACTOR - MODEL NUMBER 917.254460 AND 917.250040 STEERING ASSEMBLY

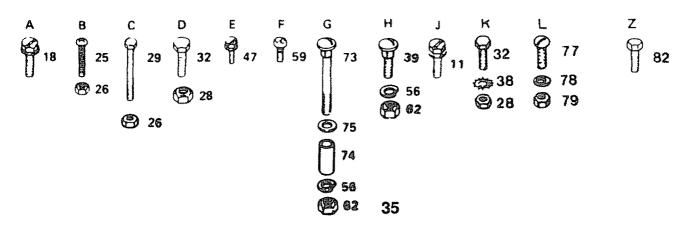


20 H.P. GARDEN TRACTOR - MODEL NUMBER 917.254460 AND 917.250040

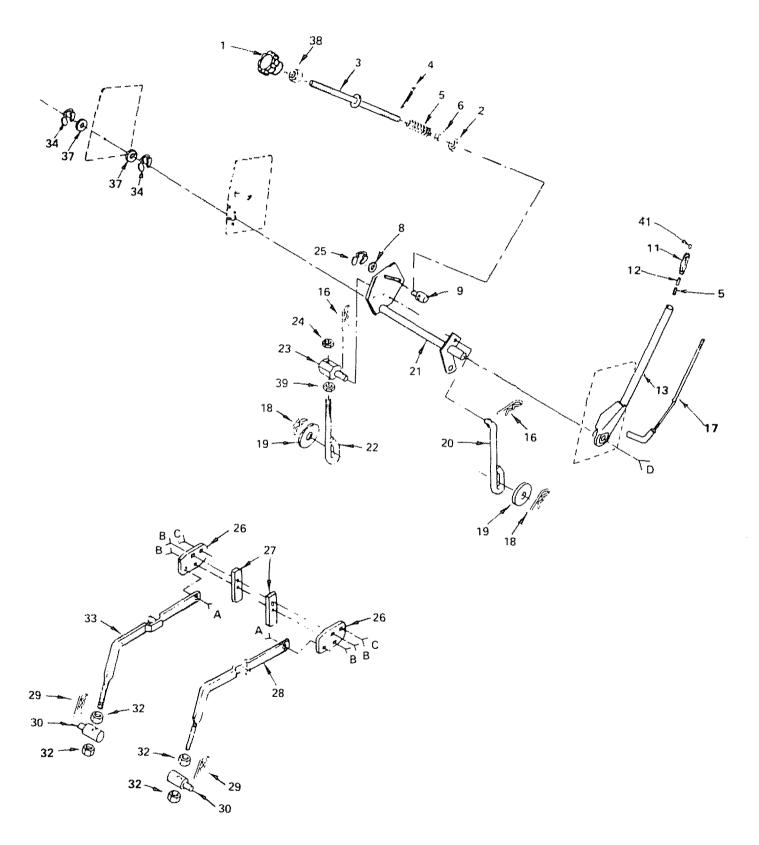
STEERING ASSEMBLY

KEY NO	PART NO.	DESCRIPTION	KE NO		DESCRIPTION
1	105810X	Decal - Cap Steering Wheel	46	73901000	Nut. Lock. Flange 5/8-11
2	100710L	Insert, Steering Wheel	47	17490508	Screw, Hex Washer Thd. Rolling
.3	73940800	*Nut Top Lock 1/2 - 20UNF			5/16-18 × 1/2
4	100712K	Washer	48	105656X	Spindle, L.H.
5	121021X	Wheel. Steering	49	105654X	Spindle, R.H.
6	100711L	*Adapter - Steering Wheel	50	121749X	Washer 25/32 x 1-1/4 x 16 Ga
7	110709X	Column - Steering	51	121334X	Rod. Tie
8	120028X	Dash	<i>52</i>	STD551131	*Washer, Lock 5/16
9	124557X 011	Dash Plate	53	STD541131	*Nut. Hex 5/16-24
10	109816X	Nyliner, Snap-In	54	3366R	Bearing
11	17490608	Screw, Hex Washer Thd Rolling	55	124032X	Link, Drag
		3/8-16 x 1/2	56	STD551137	*Washer, Lock 3/8
12	121748X	Washer 25/32 x 1-5/8 x 16 Ga	57	STD541137	*Nut, Hex 3/8-24
13	124041X	Shaft, Steering	58	1554J	Bushing, Steering
16	124036X	Bracket, Steering	59	17431008	Screw. Hex No. 10-16 x 1/2
17	124037X	Gear. Pinion	60	104757X	Cap. Hub, Front
18	17490612	Screw, Hex Washer Thd. Rolling	61	2751R	Clip. Fuel Line
		$3/8 \cdot 16 \times 3/4$	62	STD541037	*Nut, Hex 3/8-16
19	124033X	Shaft, Pitman	6.3	121232X	Spindle, Cap
20	12000029	Klip Ring	64	59192	Cap. Valve
21	6266H	Bearing, Thrust	65	65139	Stem. Valve
22	124034X	Gear, Sector	66	278H	Fitting, Grease
24	105518X	Dash. Lower	67	9040H	Bearing
25	74180512	Screw, Crown Truss Hd	68	106732X	Rim, 6" Front
		5/16-18 × 3/4	69	106222X	Tire. Front
26	73680500	Nut. Lock 5/16-18	71	108456X	Decal, Instructions, Operating
27	123783X 012	Saddle 12/016	72	59904	Tube. Tire. Front
28	73680600	Nut. Lock 3/8-16	73	72110622	Bolt. Carriage Hex 3/8-16 x 2-3/4
29	STD523120	*Bolt. Hex 5/16-18 x 2	74	121235X	Spacer
30	121236X	Spacer	75	19131416	Washer 13/32 x 7/8 x 16 Ga
31	106001X	Support Plate. Battery	77	STD512507	*Screw. Pan Head 1/4-20 x 3/4
32	STD523707	*Bolt, Hex 3/8-16 x 3/4	78	19091216	Washer 1.3/32 x 3/4 x 16 Ga
33	57079	Washer	79	73510400	Nut. Keps 1/4 NC
34	124035X	Shaft, Support Washer 5/8 x 1/4 x 16 Ga.	80	19272016	Washer 27/32 x 1-1/4 x 16 Ga
<i>35</i>	126684X	Control. Choke	82	122819X	Screw, Special 3/8 - 16 x 3/4
36	125727X		84	19111216	Washer 11/32 x 3/4 x 16 Ga
38	11050600	Washer, Lock, Int /Ext Tooth 3/8	86	STD551125	Lockwasher 1/4
39	72110608	Bolt, Carriage	87	71070410	Screw, Socket Hex 1/4 x 20 x 5/8
40	108075X	Axle. Front			
41	105663X	Support, Saddle, Rear			
42	74761060	Bolt. Hex 5/8-11 x 3-3/4			
4.3	105664X	Support, Saddle, Front	*CTAN	IDARD HARDY	VARE PURCHASE LOCALLY
45	110438X	Spacer Bearing. Front Axle	SIM	PAND NANDY	VARE - PURCHASE LUCALLY

NOTE: All component dimensions given in U.S. inches -1 inch = 25.4 mm



20 H.P. GARDEN TRACTOR - MODEL NUMBER 917.254460 AND 917.250040 LIFT ADJUSTMENT



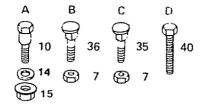
20 H.P. GARDEN TRACTOR - MODEL NUMBER 917.254460 AND 917.250040

LIFT ADJUSTMENT

	PART NO.	DESCRIPTION		PART NO.	DESCRIPTION
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19	100734K 110807X 110729X STD560907 2876H 19131016 STD541437 19151216 110810X 105848X 125631X 122364X 121004X 110739X 73980600 4939M 121006X 4921H 19171516	Knob, Height Adjustment Nut Hex Special Rod - Adjust - Lift Pin - Cotter 3/32 x 1/2 Spring Washer 13/32 x 5/8 x 16 Ga. Nut - Lock 3/8 - 16 Washer 15/32 x 3/4 x 16 Ga. Trunnion Bolt, Shoulder 3/8 - 16 Grip- Handle Plunger - Lever Lever - Lift (Includes Key No. 17) Spring Washer Center Lock Flangenut 3/8 x 16 Retainer - Spring Rod - Lever Retainer - Spring Washer 17/32 x 15/16 x 16 Ga.	21 22 23 24 25 26 27 28 29 30 32 33 34 35 36 37 38 39	124516X 110448X 110447X 73710700 12000037 105864X 121252X 121598X 9135R 106308X STD541050 121599X 12000022 STD533710 STD533707 19292016 STD541237 STD541343 74780624	 Shaft - Lift Link - Lift, Adjust Trunnion - Lift Nut Lock 7/16 - 20 UNF Klip Ring Bracket - Suspension Upstop Mower Arm - Suspension - R.H. Retainer Spring Trunnion - Lift - Lower Nut- Hex Fin. 1/2 - 13 Arm - Suspension - L.H. E-Ring Bolt - Carriage 3/8 - 16 x 1 Bolt Carriage 3/8 - 16 x 3/4 Washer 29/32 x 1 - 1/4 x 16 Ga. Nut., Hex Jam 3/8 - 16 Nut - Hex Jam 7/16-20 Bolt - Hex 3/8 - 16 x 1 - 1/2
20	110029X	Link - Lift	41	122365X	Button - Plunger

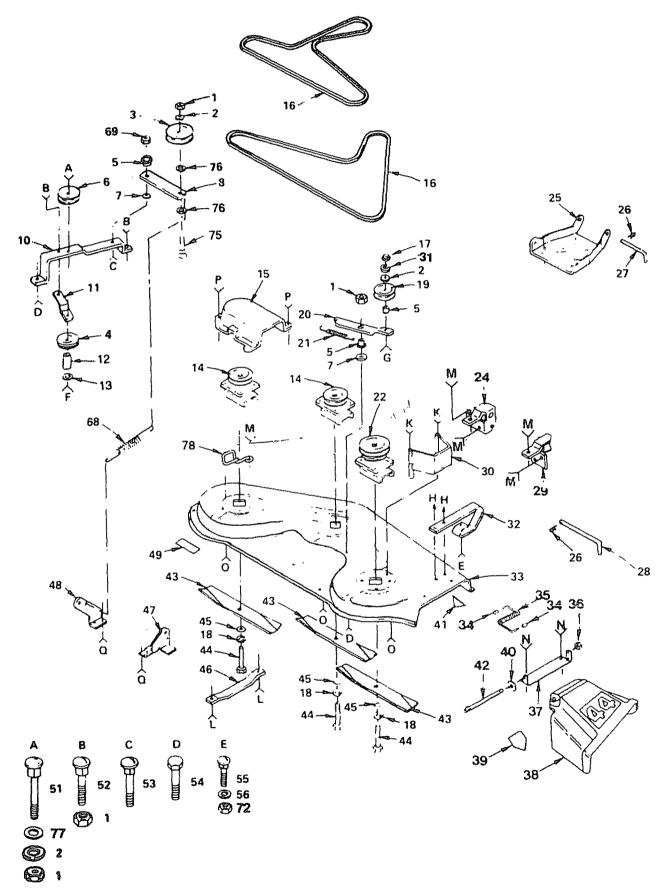
*STANDARD HARDWARE—PURCHASE LOCALLY

NOTE: All component dimensions given in U.S. inches - 1 inch = 25.4 mm



20 H.P. GARDEN TRACTOR - MODEL NUMBER 917.254460

MOWER

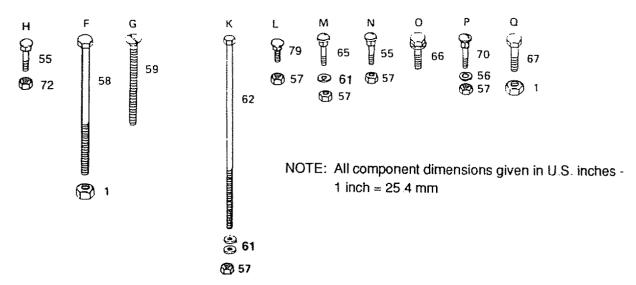


20 H.P. GARDEN TRACTOR - MODEL NUMBER 917.254460

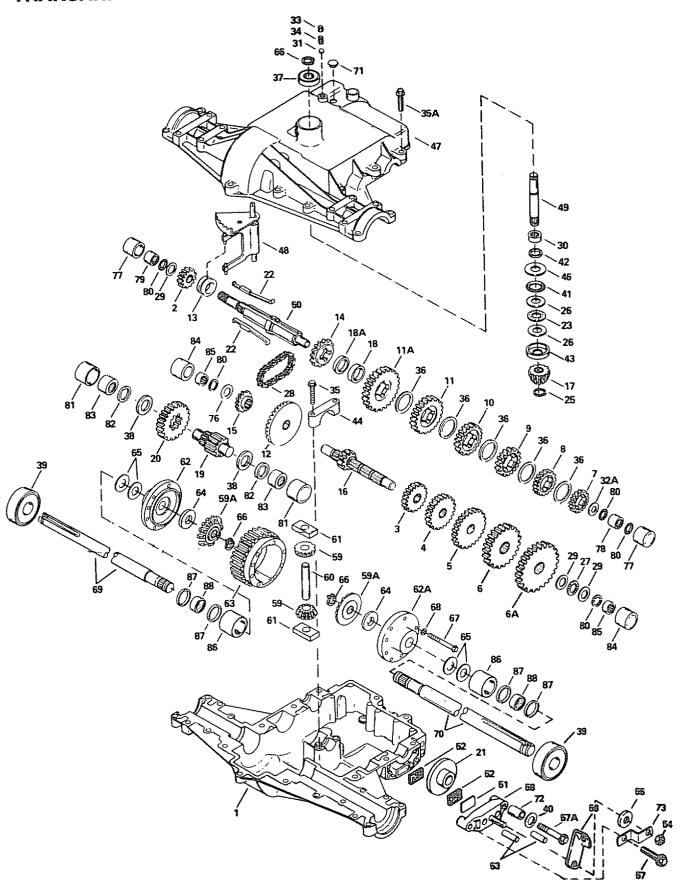
MOWER

	PART NO.	DESCRIPTION		PART NO.	DE	ESCRIPTION
		Nut - Lock 3/8 - 16 Washer 13/32 x 1 x 14 Ga. Pulley Idler Pulley, Idler Spacer Pulley Idler Washer - Wear Arm - Idler Bar Support - Idler Brace - Idler - Deck Spacer Washer, 13/32 X 13/16 X 16 Ga. Mandrel - Secondary Guard V Belt Nut, Hex 3/8 - 16 Washer - Lock 3/8 Idler - Flat Arm - Idler - Deck Spring- Extension Mandrel - Primary Bracket Lift L.H. Link Parallel Retainer - Spring Pln, Front Hinge Pin, Rear Hinge				Washer 11/32 x 5/8 x 16 Ga. Decal OPEI (not serviced) Rod Hinge Blade Bolt- Hex 3/8 - 24 x 1- 1/2 Gr. 5 Washer 13/32 x 1-1/4 x 12 Ga. Runner - L.H. Bracket Suspension, Rear-R.H. Bracket - Suspension, Rear-L.H. Decal- V-Belt - Schematic Bolt - Carriage 3/8 - 16 x 1 - 3/4 Bolt - Carriage 3/8 - 16 x 1 - 1/2 Bolt - Carriage 3/8 16 x 1-1/2 Bolt - Hex 3/8 - 16 x 1 - 1/4 Bolt - Carriage 5/16- 18 x 3,'4 Washer 11/32 x 11/16x 16 Ga. Nut - Lock 5/16- 18 Bolt - Hex 3/8 - 16 x 3 Screw - Flat Head 3/8 - 16 x 2 Washer 11/32 x 3/4x 16 Ga. Bolt - Hex 5/16 18 x 5 Bolt - Carriage 5/16 - 18 x 5/8 UNC x 3/4 Screw - Hex Washer Thread Rolling 3/8 16 x 3/4
29 30 31 32 33 34 35 36 37 38 39	106512X 108119X 10040600 8418J 121423X 105304X 106734X 110452X 109743X 109785X 121343X	Bracket Lift - R.H. Guard Bel t - R.H. Washer, Lock Hvy. Hel. Spring Runner - R. H. Housing - Mower Cap Sleeve Spring Nut . Push Bracket - Deflector Guard - Discharge Decal - Warning	67 68 69 70 72 75 76 77 78 79	STD533707 102727X STD541437 STD533107 1685H 72140620 19131210 STD533106 121352X 72110505 125493X	*	Bolt - Carriage 3/8 - 16 x 3/4 SprIng - Extension Nut - Centerlock 3/8 - 16 Bolt - Carriage 5/16 - 18 x 3/4 Nut - Lock 5/16 - 18 Bolt, Carriage 3/8 - 16 X 2 1/2 Washer 13/32 x 3/4 x 10 Ga. Washer, 13/32 X 7/8 X 10 Ga. Keeper - L.H. Mandrel Bolt - Carriage 5/16 - 18 X 5/8 Mower Deck, Complete

* STANDARD HARDWARE--PURCHASE LOCALLY



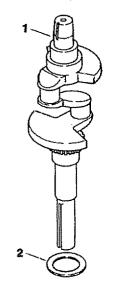
20 H.P. GARDEN TRACTOR - MODEL NUMBER 917.254460 AND 917.250040 TRANSAXLE PEERLESS - - MODEL NUMBER 143-820-016



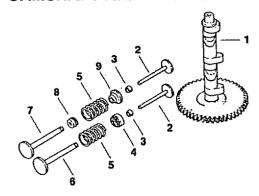
20 H.P. GARDEN TRACTOR - MODEL NUMBER 917.254460 AND 917.250040 TRANSAXLE PEERLESS - MODEL NUMBER 143-820-016

NOTE: All component dimensions given in U.S. inches. 1 inch = 25.4 mm.

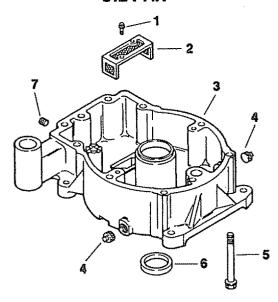
CRANKSHAFT



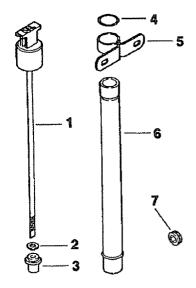
CAMSHAFT AND VALVES



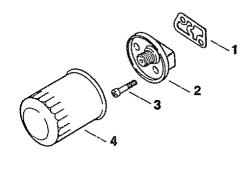
OIL PAN



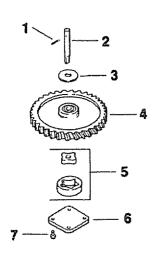
DIPSTICK



OIL FILTER



OIL PUMP



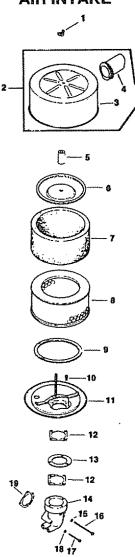
CRANKSHAFT		OIL FILTER				
	PART NO.	DESCRIPTION		PART NO.	DESCRIPTION	
1	82 014 07	Crankshaft	1	52 041 16	"Gasket, oil filter"	
2	52 468 03	"Washer, thrust .119/.122	2	52 181 03	"Adapter, oil filter"	
		(A.R.)"	3	X-55-15	"Screw, hex socket hd 5/16-	
	52 468 04	"Washer, thrust .128/.131"			18x1-1/4 (2)"	
	52 468 05	"Washer, thrust .137/.140 (A.R.)"	4	52 050 02	Oil filter	

CAMSHAFT & VALVES			DIPS	ГІСК	
	PART NO.	DESCRIPTION		PART NO.	DESCRIPTION
1	52 012 09	Camshaft	1	52 038 08	"Dipstick 13-1/2"" blade"
2	52 019 03	Tappet (4)	ż	X-25-44	"Washer, plain 5/16"
3	41 755 10	"Kit, retainer (4)"	3	52 032 14	"Seal, rubber"
4	52 413 01	"Rotator, exhaust valve (2)"	4	41 153 01	O-Ring
5	25 089 01	"Spring, valve (4)"	5	52 126 11	"Bracket, oil tube support"
6	52 016 06	"Valve, exhaust (2)"	6	52 123 20	"Tube, oil fill 11-7/8""
7	52 017 07	"Valve, intake (2)"	7	47 139 01	"Plug, hex. ctsk. 3/4""N.P.T.F."
8	52 032 13	"Seal, intake valve stem (2)"	•		, rug, rion, otom, or i run area
9	230011	"Retainer, intake valve (2)"			

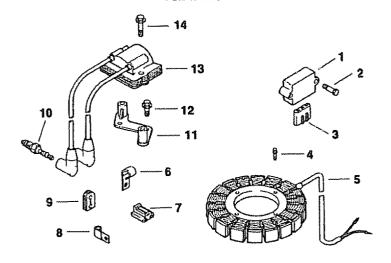
OIL PAN			OIL PUMP			
	PART NO.	DESCRIPTION		PART NO.	DESCRIPTION	
1	X-67-64	"Screw, hex. wash. hd. 10-32x7/	1	X-280-25	"Pin, roll"	
_	E0 0E0 00	16 (2)"	2	52 144 05	"Shaft, oil pump"	
2	52 050 03	"Filter, oil pickup"	3	52 422 01	"Spacer, shim (A.R. max. 2)"	
3	52 199 03	Oil pan	4	52 043 05	"Gear, oil pump"	
4	X-75-10	"Plug, sq. hd. 3/8 N.P.T.F. (2)"	5	52 393 09	Rotor set	
5	52 086 12	"Screw, hex. wash. hd. 5/16-	6	52 096 03	"Cover, oil pump"	
		18x1-1/4 (9)"	7	X-67-64	"Screw, hex. wash. hd. 10-32x7/	
6	52 032 10	"Seal, rear oil"			16 (4)"	

20 H.P. GARDEN TRACTOR - MODEL NUMBER 917.254460 and 917.250040 ENGINE MODEL NUMBER MV20S, 57517

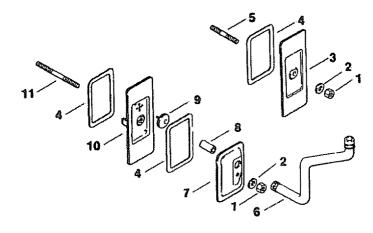
AIR INTAKE



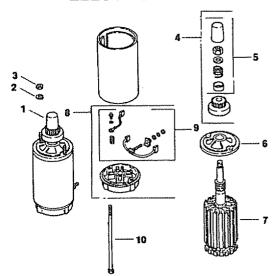
IGNITION



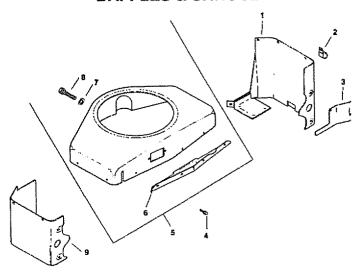
BREATHER & VENT



ELECTRIC START



BAFFLES & SHROUD

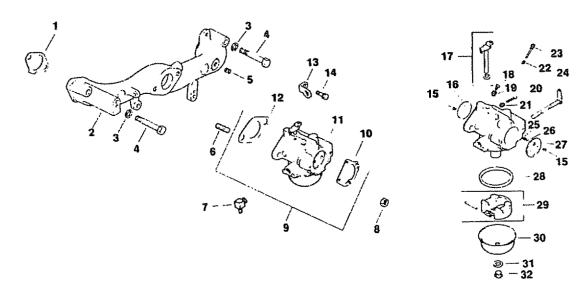


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		DECODIDATION				
	PART	DESCRIPTION		BREA	ATHER & VE	NT
NO.	NO.			VEV	PART	SECONIDION:
1	X-276-7	Wing nut 1/4-20				DESCRIPTION
2	52 755 83	"Kit, cover & tube (Includes 3,4		NO.	NO.	
		& decal 52 113 30)"		1	X-81-1	"Nut, hex. 1/4-20 (2)"
3	52 755 83	"Cover, air cleaner"		2	X-25-12	"Washer, plain 1/4 (2)"
4	52 123 21	"Tube, air intake"		3	52 096 18	"Cover, #2 cylinder valve"
5	231032	"Seal, element cover"		4	52 055 01	"Gasket, cover (3)"
6	52 082 04	"Cover, air cleaner element"		5	X-352-39	"Stud, #2 cylinder valve cover 1/
7	45 083 01			•		4-20x2-1/4"
		Precleaner		6	52 326 12	"Hose, breather"
8	45 083 02	Element		7	52 096 08	
9	237423	"Seal, air cleaner cover"				"Cover, #1 upper cyl. valve"
10	X-67-98	"Screw, hex. wash. hd. 10-32 x		8	52 032 04	"Seal, breather"
		9/16 (4)"		9	52 462 01	"Valve, umbrella"
11	52 201 06	"Base, air cleaner"		10	52 096 22	"Cover, #1 lower cyl. valve"
12	277093	"Gasket, air cleaner (2)"		11	275220	"Stud, #1 cylinder valve cover 1/
13	52 112 11	Spacer				4-20x3-1/4"
14	52 054 34	"Elbow, air intake"				
15	X-22-9	"Washer, I.T. #10 (2)"		ELEC	TRIC START	Γ
16	X-50-57	"Screw, sltd. pan hd.10-32 x 1-				
		3/4 (2)"			PART	DESCRIPTION
17	X-50-37	"Screw, sltd. pan hd. 10-32 x 2-		NO.	NO.	
		1/4 "		1	52 098 10	Starter assembly (Includes 4-
18	X-25-79	"Washer, plain #10"		•	32 030 TO	
	277069	"Gasket, elbow"		2	X-20-1	10)
	25 113 07			2		"Washer, lock 1/4 (2)"
	23 113 07	"Decal, air cleaner"		3	X-81-1	"Nut, hex. 1/4-20 (2)"
IONIIT:				4	52 755 05	"Kit, drive (Includes 5)"
IGNIT	ION			5	52 755 08	"Kit, drive parts"
KEY	PART	DESCRIPTION		6	52 227 01	"Cap, drive end"
NO.				7	52 170 03	Armature
		miero - del		8	52 227 08	"Cap, commutator end (Includes
1	25 755 03	"Kit, rectifier-regulator (Includes				9)"
		2)"		9	52 755 15	"Kit, brush"
	X-132-5	"Screw, H.C. 1/4-20xS/8 (2)"		10	52 211 03	"Bolt, thru 1/4-20x6-7/8 (2)"
	236602	Connector			25 450 03	"Tag, caution"
	X-67-51	"Screw, H.C. 10-24x3/4 (4)"				3 ,
	237878	"Kit, stator"				
6	210281	Clip		BAFF	ELS & SHRO	OUD
7	236473	Connector		VEV	DADT	DECODIBEION
8	48 154 01	Clamp			PART	DESCRIPTION
9	52 313 02	Grommet		NO.	NO.	
	51 132 02	Spark plug (2)		1	52 063 30	"Baffle, #2 cylinder head"
	52 126 08	"Bracket, module"		2	48 154 01	Clamp
	25 086 16	"Screw, hex. wash. hd. 1/4-		3	52 063 01	"Baffle, #2 cylinder top"
		20x7/8 (2)"		4	X-67-83	"Screw, hex. wash. hd. 1/4-20 x
13	52 584 02	"Module, ignition"				7/16 (20)"
	25 086 15	. •		5	52 755 70	"Kit, blower housing (Includes 6-
1**	20 000 10	"Screw, hex. wash. hd. 1/4-20xl		•	0	8)"
	47 E40 00	(2)"		6	52 217 01	
	47 518 33	"Lead, violet, rectifier-reg (11"" -				"Support, upper housing"
		14 gauge - uninsulated push on			52 468 16	"Washer, flat 1/4 (2)"
		tab terminals)"			52 086 11	Screw 1/4-20x5/8 (2)
-	52 518 17	"Lead, white, module to connec-		9	52 124 05	"Baffle, #1 cylinder head"
		tor (12-1/2"" - 18 gauge -				
		insulated push on tab and				
		uninsulated push on tab termi-	45			
		nals\"				

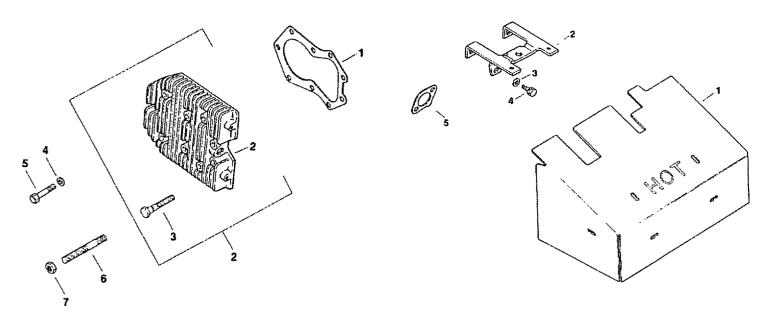
20 H.P. GARDEN TRACTOR - MODEL NUMBER 917.254460 and 917.250040 ENGINE MODEL NUMBER MV20S, 57517

CARBURETOR



CYLINDER HEAD

EXHAUST



LOW OIL PRESSURE CUTOUT



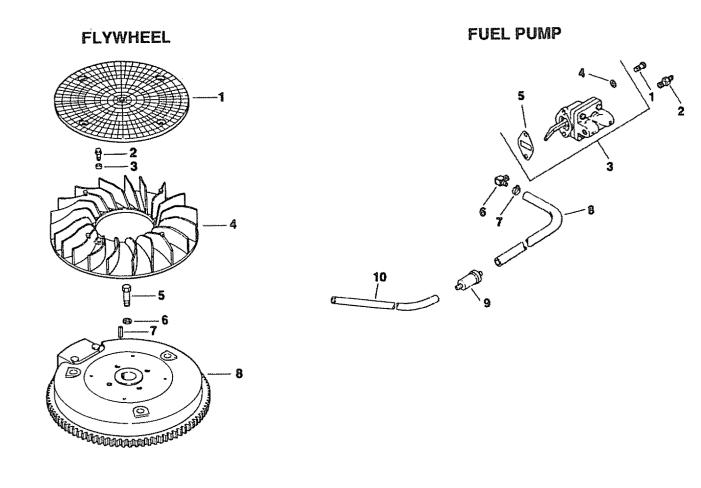
CARBURETOR

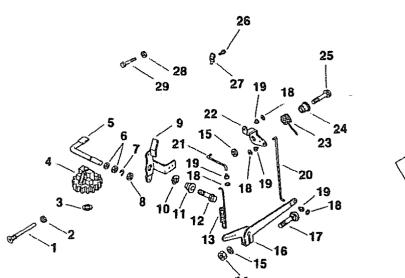
20 H.P. GARDEN TRACTOR - MODEL NUMBER 917.254460 and 917.250040 ENGINE MODEL NUMBER MV20S, 57517

CYLINDER HEAD

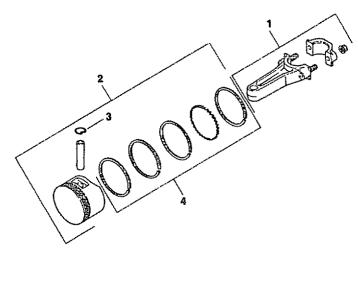
UMIL	ONLION		CILII	NDEN NEAD	
KEY NO.	PART NO.	DESCRIPTION		PART NO.	DESCRIPTION
1	52 041 09	"Gasket, intake (2)"	1	52 041 18	"Gasket, head (2)"
2	52 164 15	"Manifold, intake"	2	52 755 78	"Kit, cylinder head (2) (Includes
3	X-25-44	"Washer, plain 5/16 (4)"			3)"
4	X-6-29	"Screw, H.C. 5/16-18x1-1/4 (4)"	3	25 086 07	"Screw, hex. machine 5/16-18x2
5	X-73-23	Plug			(4)"
6	X-352-37	Stud 5/16-18xl (2)	4	220534	"Washer, plain 5/16 (18)"
7	25 155 02	"Connector, hose"	5	41 086 02	"Screw, hex. hd. 5/16-18x1-1/2
8	X-77-2	Nut 5/6 (2)			(8)"
9	52 853 29	"Kit, carburetor w/gasket	6	52 072 15	Stud 5/16-18x2 (6)
		(Includes 10-13,15-32) "	7	X-82-2	"Nut, hex. 5/16-18 (6)"
10	277069	"Gasket, air cleaner"			
11	52 053 55	Carburetor (For information only			
		not available separately)	EXHA	UST	
12	271030	"Gasket, carburetor"			
13	232867	"Strap, lifting"		PART	DESCRIPTION
14	X-67-62	"Screw, hex. wash. hd. 1/4-	NO.	NO.	
		20x3/4"	1	52 281 31	"Shield, heat"
15	25 086 27	"Screw, throttle & choke plate	2	52 126 12	Bracket
40	05 440 00	(4)"	3	X-25-72	"Washer, plain (3)"
16	25 146 02	"Plate, throttle"	4	52 086 11	Screw 1/4-20x5/8 (3)
17	52 144 16	"Shaft, throttle w/lever & seal"	5	52 041 14	"Gasket, exhaust (2)"
18	25 368 01	"Needle, idle fuel adj."			
19	25 089 02	"Spring, idle fuel"			
20	25 086 26	"Screw, idle speed adj."	LOW	OIL PRESSU	RE CUTOUT
21	25 089 04	"Spring, idle speed"		PART	
22	25 089 02	"Spring, main fuel"			DESCRIPTION
23 24	25 368 03	"Needle, main fuel"	NO.	NO.	
2 4 25	52 090 13	"Lever, choke"	1	X-75-23	"Plug, pipe 1/8 N.P.T.F."
26	25 089 03	"Spring, choke friction"			Gasket Set
20 27	25 194 01	"Ball, choke friction"		82 522 23	Short Block
28	25 146 03 25 041 04	"Plate, choke"			
2 0 2 9		"Gasket, bowt"			
	25 757 09	"Kit, float"			
	25 104 01 25 041 03	"Bowl, fuel" "Gasket, bowl reteiner cerew"			
32	25 100 05	"Gasket, bowl retainer screw"			
	25 757 11	"Screw, bowl retainer"			
	20 101 11	"Kit, carburetor repair"			

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GOVERNOR

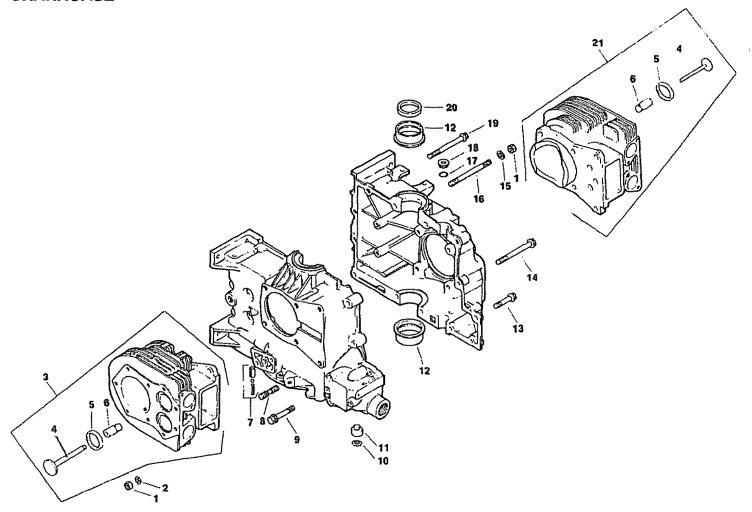


PISTON & ROD

FLYW	'HEEL		FUEL	PUMP	
KEY NO.	PART NO.	DESCRIPTION		PART NO.	DESCRIPTION
1 2	25 162 01 25 086 21	"Screen, grass" "Screw, hex. wash. hd. 1/4-	1	47 086 08	"Screw, pozidriv T.H. 1/4-20x5/8 (2)"
3	25 112 04 05 457 04	20x5/8 (4)" Spacer (4)	2 3	X-380-1 52 559 01	"Connector, straight" "Pump, fuel assembly (Includes
4 5	25 157 01 25 086 24	Fan "Screw, hex. machine 3/8-24x1- 1/4"	4 5	X-25-63 25 041 05	4 & 5)" "Washer, plain 1/4 (2)" "Gasket, fuel pump"
6 7	52 468 15 X-286-17	"Washer, plain" "Key, square 3/16x7/8"	6 7	25 155 02 X-426-9	"Connector, hose" "Clamp, hose (4)"
8	52 025 36	Flywheel	8 9 10	52 353 18 45 050 01 41 353 14	"Line, fuel" "Filter, fuel" "Hose, fuel"
GOVE	RNOR			N & ROD	. 1000, 1001
KEY NO.	PART NO.	DESCRIPTION	KEY	PART	DESCRIPTION
NO. 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	NO. 231355 X-25-12 237022 A-235743-S 52 078 04 X-25-102 X-269-28 X-25-63 52 090 18 277341 25 431 01 25 086 21 52 089 07 X-81-1 X-25-72 52 186 09 52 211 04 25 141 03 25 158 08 52 079 07 52 079 06 52 090 14	"Pin, governor stop" "Washer, plain 1/4" "Washer, thrust" "Kit, governor gear" "Shaft, governor cross" "Washer, plain 1/4 (2)" "Retainer, governor" "Washer, plain 1/4" "Lever, speed control" "Washer, tension" "Bushing, speed control lever" "Screw, hex. wash. hd. 1/4-20x5/8" "Spring, governor" "Nut, hex. 1/4-20" "Washer, plain 1/4 (2)" "Arm, governor" "Screw, R.H. sq. neck 1/4-20xl" "Ring, retaining (4)" "Bushing, linkage retaining (4)" "Linkage, governor" "Linkage, throttle" "Lever, throttle"	NO. 1 2		Connecting Rod (Std.) (2) Connecting Rod (.010) (2) Piston w/Ring Set (Std.) (2) Piston w/Ring Set (.003) (2) Piston w/Ring Set (.020) (2) Piston w/Ring Set (.020) (2) Piston w/Ring Set (.030) (2) "Retainer, piston pin (4)" Ring Set (Std. & .003) (2) Ring Set (.010) (2) Ring Set (.020) (2) Ring Set (.030) (2)
23 24 25 26	52 089 08 52 158 07 25 086 15 X-67-97	"Spring, torsion" "Bushing, thr. control lever" "Screw, hex. wash. hd. 1/4-20xi" "Screw, hex. wash. hd. 10-24x3/			
27 28 29	235778 X-70-3 52 086 05	8 (3)" Clamp (3) "Nut, hex. 10-32" "Screw, hex. hd. 10-32x7/8"			

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CRANKCASE



	PART NO.	DESCRIPTION		PART NO.	DESCRIPTION
1	X-82-2	"Nut, hex. 5/16-18 (16)"	13	25 086 10	"Screw, hex. flange 5/16-18x1-
2	52 468 12	"Washer, flat 5/16 (12)"			1/2 (3)"
3	82 755 18	"Kit, #1 cylinder barrel (Includes 4-6)"	14	25 086 13	"Screw, hex. flange 3/8-16x3-5/8 (2)"
4	52 016 06	"Valve, exhaust"	15	41 468 01	"Washer, plain (4)"
5	52 031 01	"Insert, valve seat (2)"	16	X-352-33	Stud 5/16-18x4-1/8 (2)
6	52 316 06	"Guide, valve (2)"	17	52 141 02	O-ring
7	52 755 50	"Kit, oil relief"	18	52 139 08	Plug
8	52 072 12	"Step stud 5/16-18x3/4" ,3/8- 16x5/8"",2"" long(12)"	19	25 086 11	"Screw, hex. flange 5/16-18x3-1/2 (6)"
9	25 086 12	"Screw, hex. flange 5/16-18x2	20	52 032 10	"Seal, front oil"
		(2)"	21	82 755 19	"Kit, #2 cylinder barrel (Includes
10	X-269-43	"Ring, retaining"			4-6)"
11	52 078 05	"Shaft, governor"			•
12	52 030 10	"Bearing, sleeve (Std.) (2)"			
	52 030 11	"Bearing, sleeve (.010)"			
	52 030 12	"Bearing, sleeve (020)"			

SERVICE NOTES

SERVICE NOTES

Attachments That Add to the Usefulness of Your Craftsman Garden Tractor

Sears offers a wide variety of attachments that fit your tractor. Many of these are listed below with brief explanations of how they can help you. This list was current at the time of publication: however, it may change in future years — more attachments may be added, changes (including changes in the stock number) may be made in these attachments, or some may no longer be available.

Most of these attachments do not require additional hitches or conversion kits (those that do are indicated) and are designed for easy attaching and detaching. You may order these attachments at most Sears retail stores, catalog sales offices, and through the catalog.

LAWN SWEEPERS let you collect grass clippings and leaves.

Stock No.	Path	Capacity
71-24030	30-in.	9.0 cu. ft.
71-24032	32-in.	10.0 cu. ft.
71-24033 High-Performance	32 in.	11.5 cu. ft.
71-24038	38-in.	12.5 cu. ft.

_AWN VACS for powerful collections of heavy grass clippings and leaves. All accept Wand attachment to pick up debris n hard-to-reach places.

Stock No.	Engine	Capacity	Also Required
71-2452	3HP	12 bu.	71-26471 chute
71-2447	5HP	25bu.	71-24474 chute
71-2455	3HP	8 bu.	71-26471 chute

CARTS make hauling easy.

Stock No.	Size	Capacity	
71-24353	4 cu. ft.	400 lb.	Dump cart
71-24354	10 cu. ft.	1,000 lb.	Hauling cart
71-24355	10 cu. ft.	1,000 lb	Dump cart
71-24356	14 cu. ft.	1,250 lb.	Dump cart
71-24357	17 cu. ft.	1,500 lb.	Dump cart

ROLLER for smoother lawn surface. 36-inch wide, 18 inch diameter water-tight drum holds up to 390 lb. of weight. Rounded edges prevent harm to turf. Adjustable scraper automatically cleans drum. Stock number 71-24084.

\$PREADER/SEEDERS make seeding, fertilizing, and weed killing easy. Broadcast spreaders are also useful for granular le-icers and sand.

71-24194 Drop type, 36 inch. 12 in. semi-pneumatic wheels. 100 lb. capcity steel hopper.

71-24394 Broadcasts over a 5 to 8 foot swath. 70 lb. capacity steel hopper. Noncorrosive spreading spinner, nylon gear box, stainless steel shaft.

71-24395 Broadcasts 8 to 10 foot swath. 160 lb. capacity.(covers 40,000sq. ft.)No-rust polypropylene hopper and impeller. Vinyl hopper cover.

71-2416 Broadcasts 6 to 8 foot swath. 50 lb. capacity. Corrosion-resistant construction. Polyethylene hopper.

ORING AERATOR takes small plugs out of soil to allow moisture and nutrients to reach grass roots, 36-inch swath, 24 ardened steel coring tips, 150 lb, capacity weight tray, Stock number 71-24351

LERATOR promotes deep root growth for a healthy lawn. Tapered 2.5" steel spikes mounted on 10-in. diameter discs uncture holes in soil at close intervals to let moisture soak it. Steel weight tray for increased penetration. Stock number 1-2435.

DETHATCHER loosens and flips thatch and matted leaves to lawn surface for easy pick up. Twenty spring tine teeth. Iseful to prepare bare areas for reseeding. 40 inch rear mount: Stock number 71-24303. 38 inch front mount: Stock number 71-24301.

PRAYERS use 12-volt DC electric motor that connects to the tractor battery or other 12-volt source. Includes booms for utomatic spraying when pulling, and hand held wand for spot spraying. Wand has adjustable spray pattern. For applying erbicides, insecticides, fungicides, and liquid fertilizers.

71-2458 50 psi maximum pressure with 25 foot wand length. Sprays up to 25 feet with wand.

71-24398 25 psi maximum pressure with 18 foot wand length. Sprays up to 18 feet with wand.

OZER BLADE removes snow; grades dirt, sand and gravel. 48 inches wide, 17 inches high, clears 44 inch path when ngled. Master lift controle lever for operator ease. Spring trip for snow removal on uneven pavement; built - in float for lade to follow ground contour. Reversible, replaceable scraper bar. (Use with tire chains, wheel weights or rear drawbar leight). Stock No. 71-24401

SNOWTHROWER has 40-inch swath. Drum-type auger handles powdery and wet/heavy snow. Mounts easily with simple pin arangement. Discharge chute adjusts to 240 degree arc from tractor seat. 6-inch diameter spout discharges snow 10 to 50 ft. Lift controlled at tractor seat. (Use with tire chains, wheel weights, or rear drawbar weight). Stock No. 71-24077

TIRE CHAINS are heavy duty; closely spaced extra-large cross links give smooth ride, outstanding traction. Stock No. 71-26945.

WHEEL WEIGHTS provide stability, reduce tearing of turf when moving on hills, stopping, turning, starting. Provides extra weight for traction to pull low-loads, lawn vac. Required for snow removal. For plowing: one in front frame, one in right rear tire, two on left rear tire. For snow blower or dozer blade: one on right rear tire, one on left rear tire. 55 pounds. Stock No. 71-26234. (Front or rear mounting frame bracket Stock No. 71-244360 OR 262235).

CHEVRON TIRES for extra traction. Pair of rear tires mounted on wheels. Stock No. 71-24166.

TRACTOR CAB has heavy duty vinyl fabric over tubular steel frame, fiberglass top; clear plastic windshield offers 360 degree visibility. Hinged metal frame doors with catch. Keeps operator warm and dry. Remove vinyl and windshield for use as sun protector in summer. Stock No. 71-24172.

Optional accessories for tractor cab: tinted/tempered solid safety glass wind shied with hand operated wiper (Stock No. 71-26168); 12-volt amber caution light for mounting on cab top (Stock No. 71-26169).

TRACTOR COVER protects tractor from weather. Made of Evolution 3 fabric (water-repellent, extremely breathable, light weight, soft, non-abrasive, pliable in all temperatures, durable, stain-tear-puncture resistant, will not shrink or stretch). Stock No. 71-24602.

*TILLER has 8hp engine to prepare seed beds, cultivate and compost garden residue. Chain- drive transmission. Six 11 inch dia., one piece heat-treated steel tines. Tills 30 inch path. (Requires sleeve hitch Stock No. 71-24235) Stock No. 71-25249.

*PLOW turns soil 6 inches deep, cuts 10 inch furrow. Crank adjustment controls depth, 3-position yoke sets width. Heavy steel landslide for straight forrowing. Stock No. 71-24233.

*DISC HARROW has 2 gangs of 4 steel blades that angle from 10 to 20 degrees 40 inches wide. Can hook 2 units in tandem. Stock No. 71-24234.

*REAR GRADER/LEVELER BLADE is 42-inches wide operated from driver's seat. Reversible steel blade can be angled at 30 degrees for grading. Reverses for snow plowing. Stock No. 71-24239.

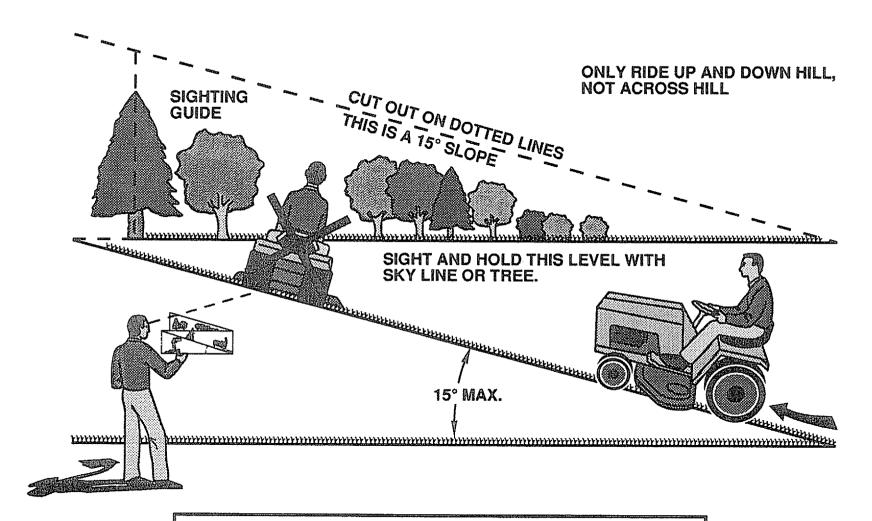
*SLEEVE CULTIVATOR is 43 inches wide. Prepares ground for seeding, helps weed control. Steel frame holds 5 adjustable sweeps. Adjusts vertically, horizontally, Stock No. 71-25304. Optional accessory for cultivator: steel furrow opener for wider for wide openings for potatoes, corn, and other deep seeded crops (Stock No. 71-25305).

WEIGHT BRACKET for drawbar for snow removal applications. Can be mounted on front of tractor for plowing applications. Uses (1) 55 lb. weight - number 71-26234.

*Asterisked attachments require sleeve hitch (Stock No. 71-24235) for use with master lift system. Single pin couples/uncouples.

Source for Attachments 842.

SUGGESTED GUIDE FOR SIGHTING SLOPES FOR SAFE OPERATION





Operate your Tractor up and down the face of slopes (not greater than 15°) never across the face. Make turns gradually to prevent tipping or loss of control. Exercise extreme caution when changing direction on slopes.

SEARS OWNER'S MANUAL

MODEL NO. 917.254460

MODEL NO. 917.250040 (without Mower Deck)

HOW TO ORDER REPAIR PARTS

CRAFTSMAN®

20.0 HP TWIN
ELECTRIC START
44" MOWER DECK
6 SPEED TRANSAXLE
GARDEN TRACTOR

Each Tractor has its own model number. Each Engine has its own model number.

The Model Number for your Tractor will be found on the Model Plate located under the seat.

The model number for the Engine will be found on the Blower Housing.

All parts listed herein may be ordered from any Sears, Roebuck and Co. Service Centers and most Retail Stores.

WHEN ORDERING REPAIR PARTS, ALWAYS GIVE THE FOLLOWING INFORMATION:

- PRODUCT 20.0 HP GARDEN TRACTOR
- MODEL NUMBER 917.254460 AND 917.250040
- ENGINE MODEL NUMBER -MV20S SPEC NUMBER -57517
- PART NUMBER
- PART DESCRIPTION

Your Sears merchandise has added value when you consider Sears has service units nationwide staffed with Sears trained technicians... professional technicians specifically trained to insure that we meet our pledge to you, we service what we sell.

Sears, Roebuck and Co., Chicago, IL 60684 U.S.A.